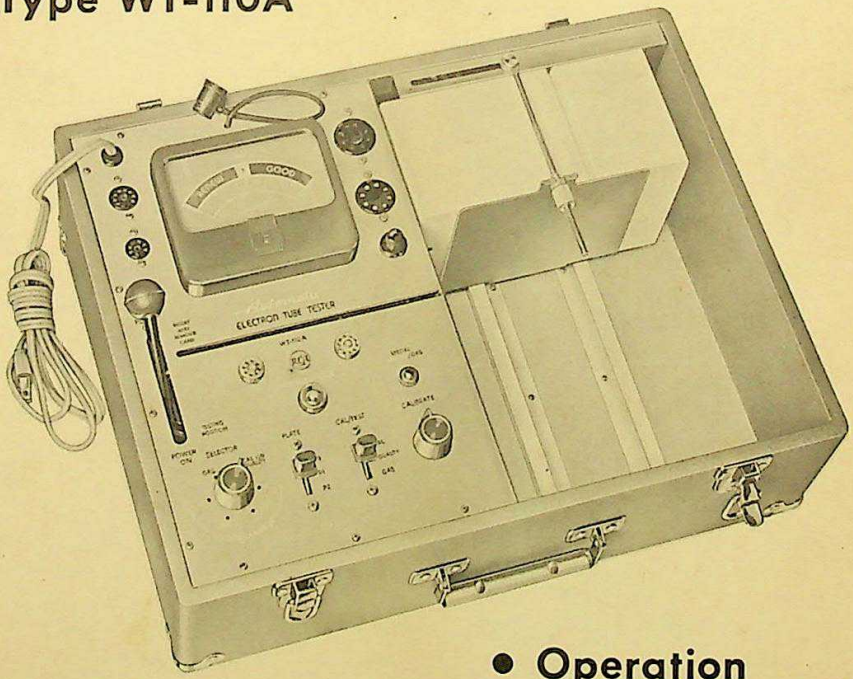
PRICE 75 CENTS

July 27 31

# RCA *Automatic* ELECTRON-TUBE TESTER

## Type WT-110A




- Description
- Operation
- Maintenance

RADIO CORPORATION of AMERICA
ELECTRON TUBE DIVISION HARRISON, N. J.

# Safety Precautions

The metal panel of this instrument is connected to the ground of the internal circuit. An important point to remember is that there is always danger inherent in working with electrical circuits which operate at hazardous voltages. Therefore, the operator should thoroughly familiarize himself with the circuit under test, bearing in mind that high voltages may appear at unexpected points in defective equipment. Additional precautions which the operator should observe are listed below.

1. It is good practice to remove power before connecting test leads to high-voltage points. If this is impractical, be *especially careful* to avoid accidental contact with equipment racks and other objects which can provide a ground. Working with one hand in your pocket and standing on a properly insulated floor lessens the danger of shock.

2. Filter capacitors may store a charge large enough to be hazardous. Therefore, discharge filter capacitors before attaching test leads.

3. Remember that leads with broken insulation provide the additional hazard of high voltages appearing at exposed points along the leads. Check test leads for frayed or broken insulation before working with them.

4. To lessen the danger of accidental shock, disconnect test leads immediately after test is completed.

5. Remember that the risk of severe shock is only one of the possible hazards. Even a minor shock can place the operator in hazard of more serious risks such as a bad fall or contact with a source of higher voltage.

6. The experienced operator continuously guards against injury and does not work on hazardous circuits unless another person is available to assist in case of accident.

## ITEMS

**Supplied with WT-110A**

1 Set of Punched Cards
1 Master Punched Card
1 Test Card
1 Instruction Booklet
1 Warranty Registration Card

© 1957 by Radio Corporation of America
All Rights Reserved
TMK ®, Marca Registrada

Instr. WT-110A 9-57
Printed in U.S.A.

# Description

The RCA WT-110A *Automatic* Electron-Tube Tester is designed to test all popular receiving tubes for general quality, including interelectrode shorts and leakage. Shorts and leakage indications are provided by a neon lamp. The general-quality test is based on measurement of the transconductance of the tube. Readings are provided in terms of "RENEW-?-GOOD" on a 4½-inch meter. The gas condition of the tube is also indicated on the meter.

The outstanding feature of the WT-110A is the use of an individual punched card for each different tube type to automatically set up all tube-pin and test-voltage connections when the card is inserted into the panel slot of the tester. It is not necessary to adjust external switches or other controls to set up pin and operating-voltage connections for the tube.

A set of pre-punched cards for 7-pin and 9-pin miniature, octal-, and loctal-type receiving tubes is supplied with the WT-110A. The cards, made of durable plastic, are permanently hinged in the case adjacent to the tester and are indexed in numerical-alphabetical sequence by tube type. The punched-card system used in the WT-110A accommodates the popular receiving-tube types employed in television and radio receivers, including diodes, triodes, tetrodes, pentodes, and multiunit receiving tubes which have similar and dissimilar units. The WT-110A can also be used to check certain industrial types. The permanently attached punched-card file can be easily disengaged to permit the addition or removal of individual cards.

Testing of tube types not included in the card file is provided for in two ways. Accessory punched cards are available in packages of 24 cards. Individual test cards also may be prepared and punched by the operator. An accessory package of 24 blank cards (RCA WG-325A Accessory Unpunched Cards) and the RCA WG-326A Accessory Card Punch are available on separate order to permit the simple and quick preparation of additional test cards. Card punching information on additional types is readily obtainable from the Radio Corporation of America.

Special provisions are included for making high-resistance interelectrode leakage and low-value gas-current tests on certain tube types. These special provisions make possible a better evaluation of tube types used in applications having critical leakage or gas limitations.

Other features of the RCA WT-110A *Automatic* Electron-Tube Tester include a front panel calibration control to permit compensation for above- or below-normal line voltage, easily replaceable screw-mounted tube sockets, and steel pin-straighteners mounted on the front panel.

The WT-110A is designed for general service and testing use by skilled or unskilled personnel. The unit is housed in an attractive blue plastic-covered case with detachable cover. The panel is satin-finished aluminum. Weight of the instrument, with cards, is approximately 25 pounds. The unit measures 17¼" w x 13¼" d x 6⅞" h. Power consumption is approximately 50 watts.

# Operation

**General.**

Always make sure that the correct punched card is inserted in the WT-110A for the tube under test. Failure to observe this precaution may result in damage to the tube or the WT-110A.

When a punched card is inserted into the slot and the lever pulled down, power is automatically applied to the WT-110A and to the tube under test. Since no other power switch is provided, disengage the lever and remove the punched card from the card slot upon completion of tube testing. Do not operate the tester with a tube installed for an extended period of time.

Tube types which have the same basic type designation but which have different suffixes have essentially the same electrical characteristics. For example, the RCA-6SN7-GTA and the RCA-6SN7-GTB are different versions of the prototype RCA-6SN7-GT, and utilize the same punched card for testing. Tube types such as the RCA-6BQ6-GT, 6BQ6-GTB/6CU6, which carry two basic type designations ("double-branded" types), are listed in the card file under type designations 6BQ6-GT and 6CU6. Either card may be used to test the tube.

Two punched cards are required for complete testing of multiunit types having dissimilar units. An example of such a type is the RCA-6AV6 Twin Diode—High-Mu Triode. One card is required for the triode section and one for the two diode sections. Only one card is required for testing the two diode units because the diode units in this tube are similar. The indices of the two cards for the 6AV6 are printed as follows: (first card) "6AV6 DIODE SECTION — 1 OF 2 CARDS" and (second card) "6AV6 TRIODE SECTION — 2 OF 2 CARDS". Instructions for testing multiunit tube types which have similar units are given under "General Testing Procedure". Note that with multiunit tubes, each unit is checked individually, not simultaneously in parallel.

Miniature tubes which have bent pins may be repaired by inserting them into the appropriate steel pin-straightening sockets located on the panel.

The plastic cards may be cleaned by washing them with a mild solution of soap and water.

**Complete Testing Procedure**

A complete tube test with the WT-110A includes tests for shorts and leakage, gas, and quality. A tube is tested as follows (see Figure 1):

1. Locate the appropriate card in the punched-card file and slide the card along the metal rod to a point opposite the insertion slot (2) in the tester. With the lever (3) in the CARD OUT position, swing the card up to the left and into the slot.

2. Hold the card down in place with the right hand and pull the lever to the CARD IN position with the left hand. If the card is seated correctly, the horizontal line bearing the imprint "Insert card to this line" will be level with

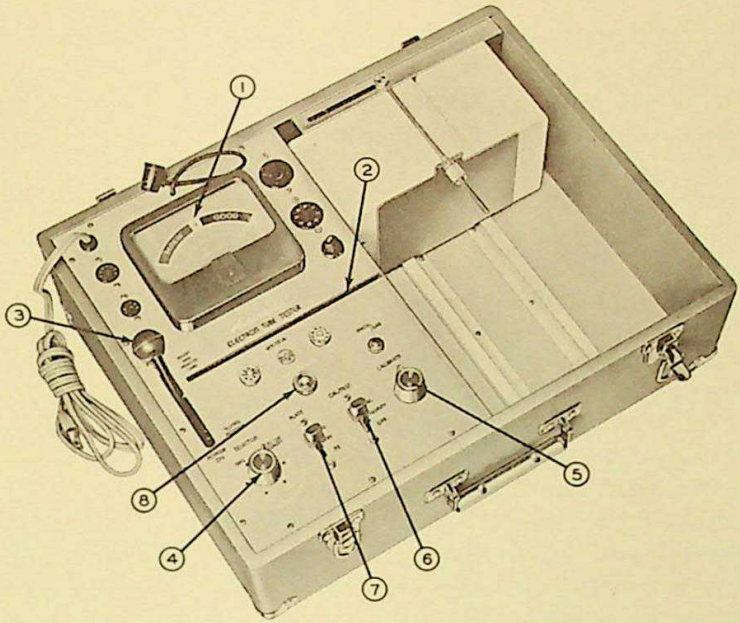



**Figure 1. WT-110A *Automatic* Electron-Tube Tester. See text for operating details.**

the top of the slot. Power is now applied to the WT-110A and to the tube under test.

3. Insert the tube to be tested into the appropriate test socket.

4. Set the SELECTOR control (4) to the "CAL OR QUALITY" position. Hold the CAL/TEST switch (6) in the "CAL" position and adjust the CALIBRATE control (5) to line up the meter pointer with the center-scale "CAL" line on the meter (1). Release the CAL/TEST switch.

5. Rotate the SELECTOR control clockwise through the four "SHORTS/LEAKAGE" positions while watching the INDICATOR lamp (8). Tap the tube gently while testing in each of the four switch positions. If the lamp glows steadily or flashes while being tapped when the SELECTOR switch is set to any of these four positions, discard the tube without further testing. Brief flashing of the lamp between switch positions does not indicate that the tube is defective. If a multiunit tube is tested, repeat the shorts/leakage test for each of the units, as described in step 7.

6. Rotate the SELECTOR control to the "GAS" position. Note the point on the 0-10 meter scale at which the pointer comes to rest. Move the CAL/TEST lever switch to the "GAS" position. The distance which the meter pointer moves to the right is an indication of the relative amount of gas contained in the tube. Note: Several seconds may be required for the meter to provide a gas reading.

### Special Leakage/Gas Test

If a tube type requires a special leakage/gas test, set the SELECTOR control to "GAS", depress the SPECIAL LEAKAGE/GAS pushbutton, then follow the

procedure given in step 6. Depressing the SPECIAL LEAKAGE/GAS pushbutton reduces the bias applied to the tube under test.

It may be necessary to check the leakage resistance of a tube used in some special applications, such as computer or rf circuits, with a more sensitive test than is required for a normal shorts test. Depressing the SPECIAL LEAKAGE/GAS pushbutton increases the sensitivity of the shorts test to 2 megohms.

7. Set the SELECTOR control to the "QUALITY" position and, unless indicated on the punched card, read the quality indication from the red (RENEW), yellow (?), or green (GOOD) section of the meter scale. The quality of some diodes must be read from the 0-10 scale, as indicated in the upper right-hand corner of the card.

*A complete test of multiunit tubes which have similar units,* such as the RCA-6SN7-GT Medium-Mu Twin Triode and the RCA-6AL5 Twin Diode, requires that each unit be tested individually. Tests of these types utilize only a single punched card. Special testing notations, such as "Test P1 and P2", are contained in the upper right-hand corner of the card.

For example, the RCA-6SN7-GT is tested for shorts and leakage, gas, and quality as described in the foregoing procedure. Because this tube is a twin-unit type, however, it is necessary to test both units for shorts and leakage, and quality. It is sufficient to test only one unit for a complete gas test. The shorts/leakage test and the quality test are made first with the PLATE switch in the "P1" position. These tests are then repeated with the PLATE switch set to the "P2" position. A triple-unit tube having similar units, such as the RCA-6BC7 Triple Diode, is tested in similar manner except that the PLATE switch is set consecutively to the "P1", "P2", and "P3" positions.

*A complete test of multiunit tubes which have dissimilar sections,* such as the RCA-6AV6 Twin-Diode — High-Mu Triode, requires the use of two punched cards. One card is provided for testing the two diode units; another card is provided for testing the triode unit. A single gas test will indicate the general gas condition of the tube. The shorts/leakage and quality tests must be made for each unit individually, and both punched cards must be used.

## Availability of New Punched Cards

The tube types included in the punched-card file supplied with the WT 110A have been selected on the basis of their frequency of use in radio and television receivers. Two methods are provided for keeping the file up-to-date.

*Prepunched and printed cards* for new tube types may be purchased as they become available through local RCA distributors. Small packages of cards for groups of newer tubes will be made available periodically at reasonable cost. Prepunched cards for individual tube types are not available.

*Unpunched blank cards* are available in 24-card packages (RCA WG-325A) on separate order to provide for punching of individual cards for newer tube types. This arrangement permits setting up a card as soon as the tube and card-punching information becomes available. A master punched card is provided

with the WT-110A; a special hand punch, RCA WG-326A Accessory Card Punch, is available on separate order.

FOR LATEST INFORMATION ON TEST CARDS, see your local RCA distributor or write to: Commercial Engineering, Radio Corporation of America, Harrison, New Jersey.

## How to Prepare Punched Cards

Preparation of a punched card for a particular tube type requires the following items (see Figure 2)

1. Master Card, RCA Stock No. 215426.
2. Unpunched plastic cards, RCA WG-325A Accessory Unpunched Cards (24).
3. Steel hand punch, RCA WG-326A Accessory Card Punch.

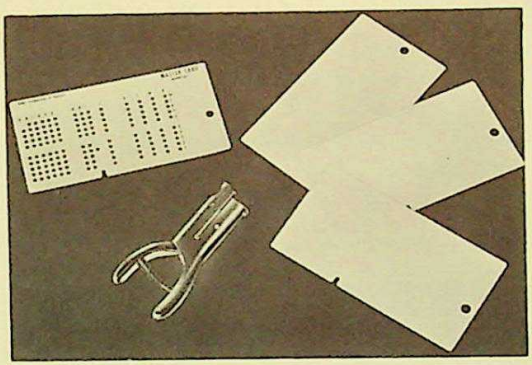


**Figure 2. Items required for preparing punched cards. Master punched card is furnished with WT-110A.**

A new card is prepared as follows:

1. Place the Master Card on top of a blank card with the hole on the right-hand side of the card.
2. Carefully line up the index slots and the bottom edges of the cards. Clip the two cards together with three or four paper clips around the edges (see Figure 3).

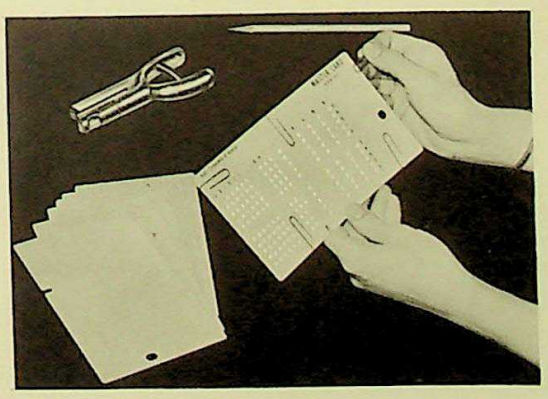


**Figure 3. Line up index slots and bottoms of master card and blank card. Clip two cards together.**

3. With a sharp-pointed pencil, inscribe only those holes called for in the hole-punching instructions through the master card and onto the blank card (see Figure 4).

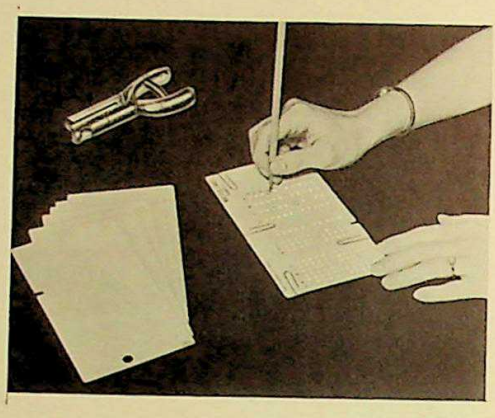
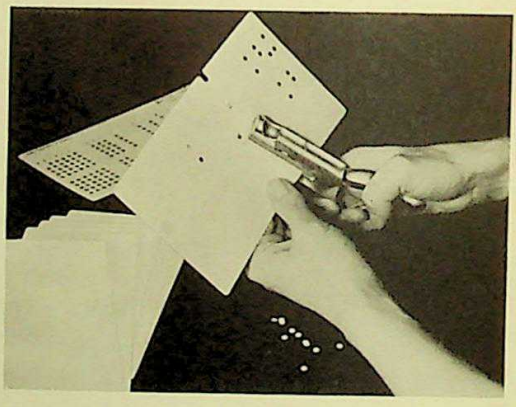


**Figure 4. Use sharp pointed pencil to inscribe hole outlines on blank card.**

4. When marking of the blank card is completed, recheck the encircled holes against the hole-punching instructions for the particular tube type.

5. Detach the paper clips and Master Card. Punch out all the penciled circles on the blank card with the WG-326A Accessory Card Punch (see Figure 5). Take care to center the penciled circles exactly in the die by sighting through the hole in the top of the punch.

**Figure 5. Center each penciled outline exactly in die on top of punch before punching hole.**



Cards are added or removed from the WT-110A Card File by unscrewing the file rod at the front of the case and pushing the rod out through the rear eyelet. Insert or remove the card and reinstall the rod.

# Maintenance

Caution: See "Safety Precautions", page 2

**General:**

If it becomes necessary to replace any of the parts in the WT-110A, use only RCA Replacement Parts or their equivalents. When ordering Replacement Parts, consult the Replacement Parts List in this instruction booklet and specify the code and serial numbers of the instrument as well as the stock number of the replacement part.

To remove the instrument from the case, remove ten screws from the edges of the panel and remove four screws from the right-hand lip in the bottom of the case. Lift the panel to the left and turn it upside down. The chassis is mounted separately in the bottom of the unit.

**Meter Mechanical Zero Adjustment**

When power is removed from the WT-110A, the meter pointer should rest at the left-hand zero mark. If the pointer comes to rest at a point above or below this mark, reset the zero-adjust screw at the front of the meter with a screw driver to bring the pointer into exact alignment.

**Troubleshooting**

The contact pins in the matrix are normally shorted when no card is installed in the card slot and the lever is in the "Power Off" position. When a card is installed in the slot and the lever is in the "Power On" position, all contacts except those which line up with the card holes will be opened. Power can only be applied to the WT-110A when a card is inserted and the matrix is closed. Trouble shooting requires use of a special test card, which is included with the WT-110A, and various tube cards, as described later.

If any operational difficulty arises, use the following check-out procedure.

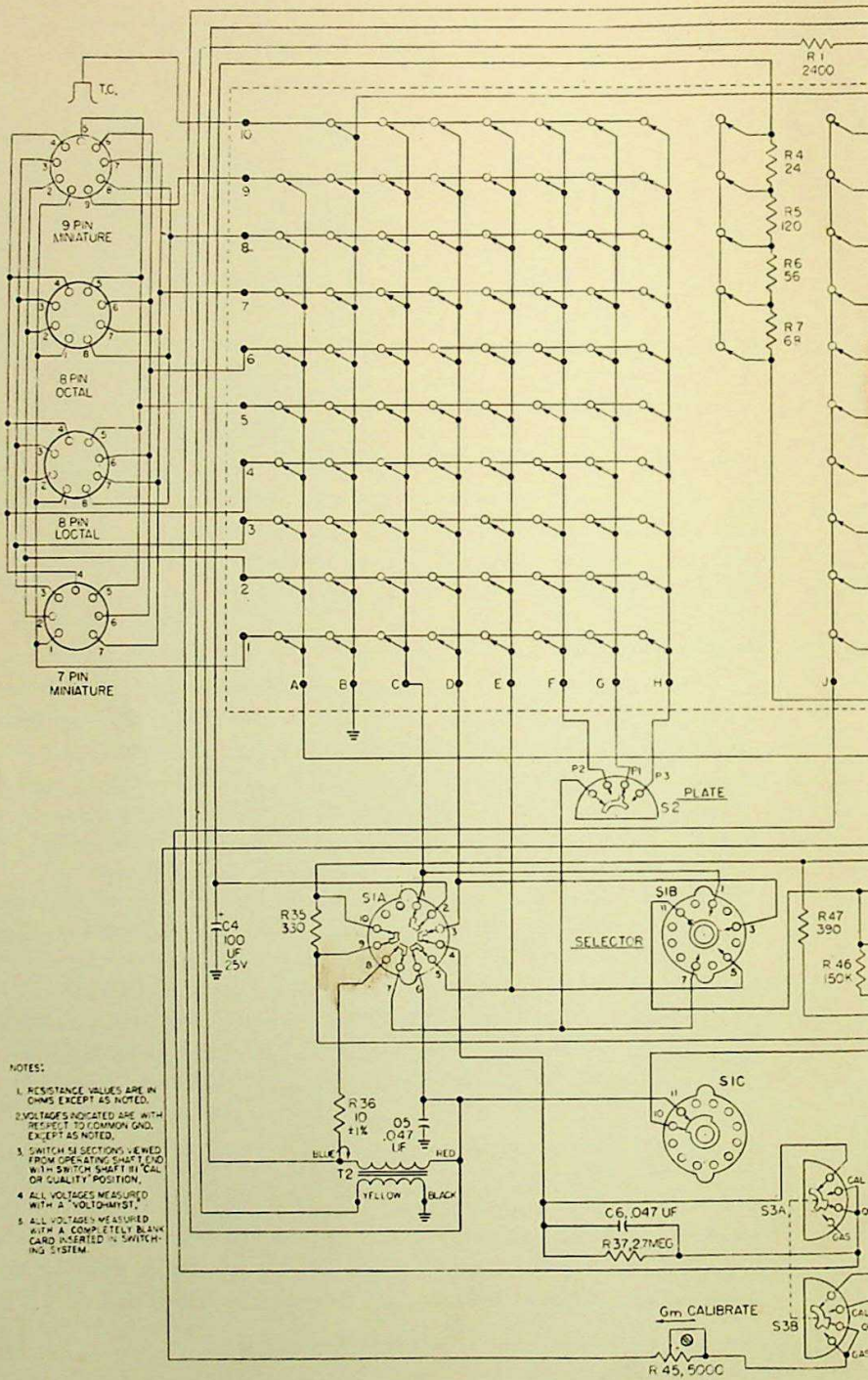
1. Install the special test card and close the matrix. Do not install a tube.

2. Calibrate the WT-110A. If the instrument can be calibrated, the fuse, interlocks, meter, meter rectifier, current transformer, and CALIBRATE potentiometer are functioning correctly. If the WT-110A is calibrated at a line voltage of 110 volts, the pointer on the CALIBRATE control should be in the approximate center of its range and the meter pointer should read between 6 and 7 on the meter scale. If any of these performance conditions are not met, check the parts enumerated above for defects.

If the calibrating circuit is functioning, the internal power-supply voltages can be checked by inserting the cards only for the tube types shown below and measuring the voltages at the indicated tube pins with a VoltOhmyst*. A complete check of all these voltages will provide an overall check of the various power-supply voltages. Voltages are measured to chassis and should be within

*(Continued on page 14)*

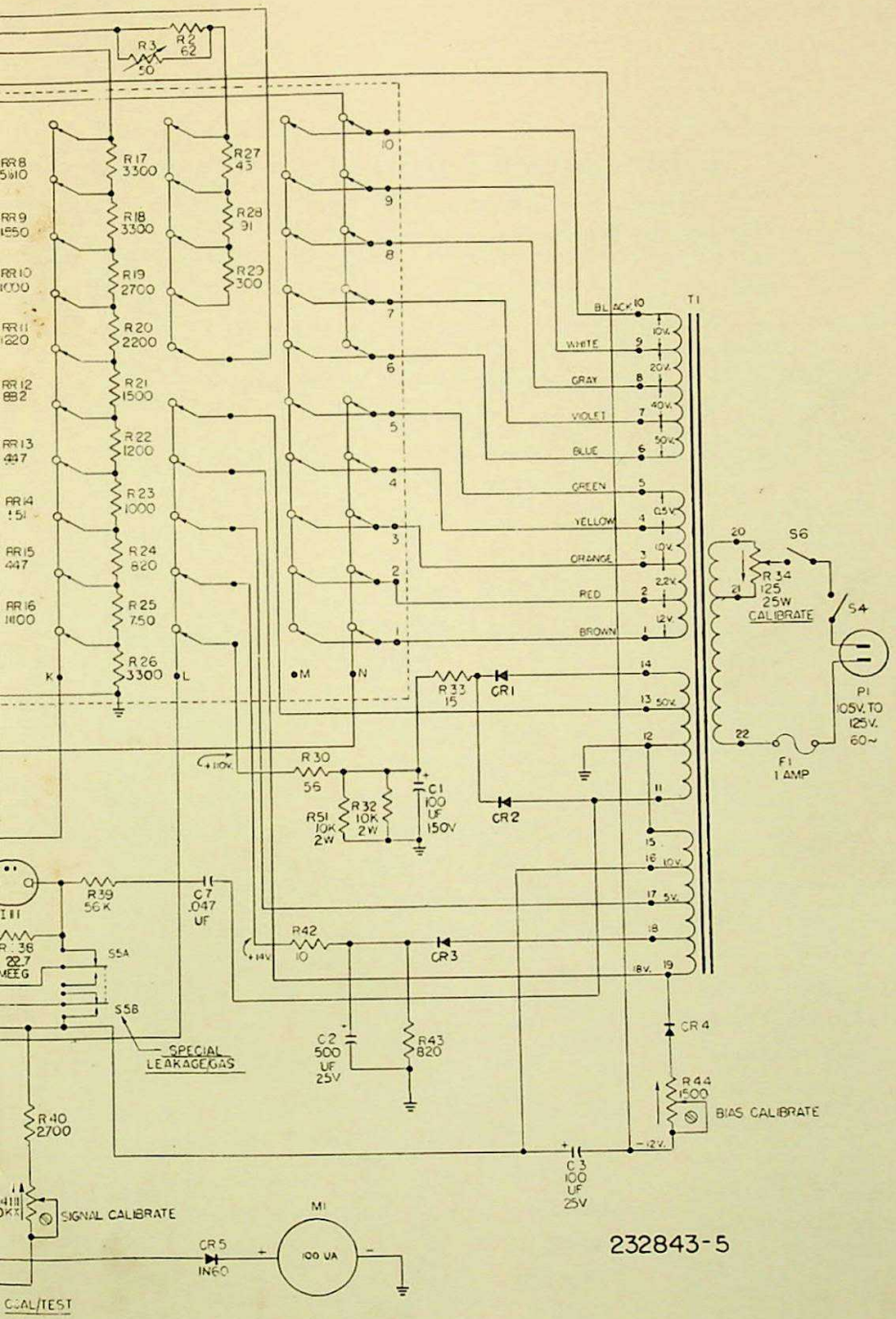
*Trade Mark Reg. U. S. Pat. Off.




NOTES:

1. RESISTANCE VALUES ARE IN OHMS EXCEPT AS NOTED.
2. VOLTAGES INDICATED ARE WITH RESPECT TO COMMON GND. EXCEPT AS NOTED.
3. SWITCH SI SECTIONS VIEWED FROM OPERATING SHAFT END WITH SWITCH SHAFT IN "CAL OR QUALITY" POSITION.
4. ALL VOLTAGES MEASURED WITH A "VOLTOHMYST."
5. ALL VOLTAGES MEASURED WITH A COMPLETELY BLANK CARD INSERTED IN SWITCHING SYSTEM.

**Schematic diagr**




232843-5

**ni of WT-110A**

# Replacement Parts List

## WT-110A Automatic Electron-Tube Tester

**Order all parts by stock number through a local RCA distributor.**

| Symbol No. | Description | Stock No. |
|---|---|---|
| | **Capacitors** | |
| C1 | Electrolytic, dry: 100 μf ±50% −10%, 150 v | 210139 |
| C2 | Electrolytic, dry: 500 μf ±50% −10%, 25 v | 99151 |
| C3 C4 | Electrolytic: 100 μf, 25 v | 79751 |
| C5 C6 C7 | Tubular, paper: 0.47 μf ±20%, 400 v | 73553 |
| | • • • • • • | |
| CR1 CR2 | Rectifier, selenium: 130 v, 65 ma | 215415 |
| CR3 CR4 | Rectifier, selenium: 20 v, 75 ma | 215416 |
| CR5 | Diode, crystal: type 1N60 | 76675 |
| F1 | Fuse: 1 amp, 250 v | 14133 |
| I1 | Lamp, neon: type NE-51 | 101857 |
| M1 | Meter: 0-100 μamp | 215409 |
| | **Resistors** | |
| R1 | Composition: 2400 ohms ±5%, ½ w | 502224 |
| R2 | Composition: 62 ohms ±5%, ½ w | 3579 |
| R3 | Variable, wire wound: 50 ohms ±20%, 1½ w | 215825 |
| R4 | Composition: 24 ohms ±5%, ½ w | 502024 |
| R5 | Composition: 120 ohms ±5%, ½ w | 502112 |
| R6 | Composition: 56 ohms ±5%, ½ w | 502056 |
| R7 | Composition: 68 ohms ±5%, ½ w | 502068 |
| R8 | Composition: 510 ohms ±5%, ½ w | 502151 |
| R9 | Composition: 150 ohms ±5%, ½ w | 502115 |
| R10 | Composition: 100 ohms ±5%, ½ w | 502110 |
| R11 | Composition: 120 ohms ±5%, ½ w | 502112 |
| R12 | Composition: 82 ohms ±5%, ½ w | 502082 |
| R13 | Composition: 47 ohms ±5%, ½ w | 502047 |
| R14 | Composition: 51 ohms ±5%, ½ w | 502051 |
| R15 | Composition: 47 ohms ±5%, ½ w | 502047 |
| R16 | Composition: 100 ohms ±5%, ½ w | 502110 |
| R17 R18 | Composition: 3300 ohms ±5%, ½ w | 502233 |
| R19 | Composition: 2700 ohms ±5%, ½ w | 502277 |
| R20 | Composition: 2200 ohms ±5%, ½ w | 502222 |
| R21 | Composition: 1500 ohms ±5%, ½ w | 502215 |
| R22 | Composition: 1200 ohms ±5%, ½ w | 502212 |
| R23 | Composition: 1000 ohms ±5%, ½ w | 502210 |
| R24 | Composition: 330 ohms ±5%, ½ w | 502133 |
| R25 | Composition: 750 ohms ±5%, ½ w | 19785 |
| R26 | Composition: 3300 ohms ±5%, ½ w | 502233 |
| R27 | Composition: 43 ohms ±5%, ½ w | 502043 |
| R28 | Composition: 91 ohms ±5%, ½ w | 502091 |
| R29 | Composition: 300 ohms ±5%, ½ w | 502130 |
| R30 | Composition: 56 ohms ±10%, ½ w | 502056 |
| R31 R32 | Composition: 10,000 ohms ±10%, 2 w | 522310 |
| R33 | Composition: 15 ohms ±10%, ½ w | 502015 |
| R34 | Variable: wire wound, 125 ohms ±10%, 25 w | 215411 |
| R35 | Composition: 330 ohms ±5%, ½ w | 502133 |
| R36 | Carbon film: insulated, 10 ohms ±1%, 1 w | 215410 |
| R37 R38 | Composition: 2.7 meg ±10%, ½ w | 72788 |
| R39 | Composition: 56,000 ohms ±10%, ½ w | 502356 |
| R40 | Composition: 2700 ohms ±5%, ½ w | 502227 |
| R41 | Variable, carbon: 10,000 ohms ±20%, ¼ w | 215414 |
| R42 | Composition: 10 ohms ±10%, ½ w | 502010 |
| R43 | Composition: 820 ohms ±5%, ½ w | 502182 |
| R44 | Variable, carbon: 1500 ohms ±20%, ¼ w | 215412 |
| R45 | Variable, carbon: 5000 ohms ±20%, ¼ w | 215413 |
| R46 | Composition: 150,000 ohms ±10%, ½ w | 502415 |
| R47 | Composition: 390 ohms ±5%, ½ w | 30198 |
| S1 | Switch, rotary: 2 sections, 6 positions, 7 circuits | 215404 |
| S2 | Switch, lever: 2 poles, 3 positions, spring return | 215520 |
| S3 | Switch, lever: 2 poles, 2 positions, spring return | 215405 |
| S4 | Switch, micro | 215406 |
| S5 | Switch, push button: DPDT, non shorting | 215427 |
| S6 | Switch, snap: SPST | 215674 |
| T1 | Transformer, power | 215407 |

| Symbol No. | Description | Stock No. | Symbol No. | Description | Stock No. |
|---|---|---|---|---|---|
| | **Miscellaneous** | | | Jewel, pilot lamp | 208080 |
| T2 | Transformer, current: variable, 60 cps | 215408 | | Knob, control | 212148 |
| XF1 | Holder, fuse | 48894 | | Knob: for lever switch | 215419 |
| | Board, printed circuit: front | 215396 | | Knob: for actuating lever | 215420 |
| | Board, printed circuit: back | 215397 | | Panel, front | 215388 |
| | Board, pressure | 215398 | | Pin, contact: for printed circuit board | 215395 |
| | Bracket: for printed circuit board | 215389 | | Rod, card retaining | 215401 |
| | Bracket: for actuating shaft | 215390 | | Shaft, actuating | 215391 |
| | Bushing, knurled: for card holder clamping stud | 215403 | | Socket, tube: 7 pin | 94925 |
| | Cam, actuating | 215392 | | Socket, tube: 9 pin | 94926 |
| | Case, carrying: complete with handle | 215387 | | Socket, tube: octal | 215417 |
| | Card, master punch | 215426 | | Socket, tube: locktal | 215418 |
| | Collar: for actuating shaft | 215393 | | Socket, pilot lamp | 43734 |
| | Cord, power: 72" long, with plug | 70392 | | Spring, card guide strip | 215402 |
| | Eyelet, pin contact washer | 215422 | | Spring, pin contact | 215421 |
| | Handle, carrying case | 215424 | | Spring, pin: for actuating shaft | 215423 |
| | Holder, card: complete assembly | 215399 | | Spring, card clamping stud | 215425 |
| | | | | Straightener, pin: 7-pin | 209583 |
| | | | | Straightener, pin: 9-pin | 209584 |
| | | | | Stud, pivot: for pressure board | 215394 |
| | | | | Stud, clamping: assembly for card holder | 215400 |

## Accessory Socket Adapters for WT-110A

Certain tube types which have bases and pin arrangements different from those provided for on the WT-110A may be tested if an appropriate tube-socket adapter is used. These adapters, which plug into the octal socket on the WT-110A panel, are available on separate order through a local RCA distributor. The following set and individual adapters are available:

RCA WG-337A Tube Socket Adapter Set
4 adapters for Testing Tubes with Small 4-Pin bases, Small 5-Pin bases, Small 6-Pin bases, and Small & Medium 7-Pin bases in RCA WT-110A *Automatic* Electron-Tube Tester

RCA WG-338A Tube Socket Adapter
For Testing 7-Lead In-Line Subminiature Tubes in RCA WT-110A *Automatic* Electron-Tube Tester

RCA WG-339A Tube Socket Adapter
For Testing 8-Lead Circular Subminiature Tubes in RCA WT-110A *Automatic* Electron-Tube Tester

20 per cent of indicated values. If voltages are measured from top of front panel, count tube pins in a counterclockwise direction around tube socket.

| 1B3-GT | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 (NC) | 0 |
| 2 (F) | 0 |
| 3 (IC) | 0 |
| 4 (NC) | 0 |
| 5 (IC) | 0 |
| 6 (NC) | 0 |
| 7 (F) | 1.25v ac |
| 8 (IC) | 0 |
| TOP CAP (P) | 50v ac |

| 5V4-G | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 (NC) | 0 |
| 2 (H) | 5v ac |
| 3 (NC) | 0 |
| 4* (P2) | 18v ac |
| 5 (NC) | 0 |
| 6 (P1) | 18v ac |
| 7 (NC) | 0 |
| 8 (H, K) | 0 |

| 6AL5 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 (K1) | 0 |
| 2* (P2) | 5v ac |
| 3 (H) | 6.3v ac |
| 4 (H) | 0 |
| 5 (K2) | 0 |
| 6 (NC) | 0 |
| 7 (P1) | 5v ac |

| 6BQ6-GTB/6CU6 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 (NC) | 0 |
| 2 (H) | 6.3v ac |
| 3 (NC) | 0 |
| 4 (G2) | +110v dc |
| 5 (G1) | −12v dc, 1v ac |
| 6 (NC) | 0 |
| 7 (H) | 0 |
| 8 (K) | 0 |
| TOP CAP (P) | +110v dc |

| 12AD6 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 (G1) | 1v ac |
| 2 (K) | 0 |
| 3 (H) | 12.6v ac |
| 4 (H) | 0 |
| 5 (P) | +13.5v dc |
| 6 (G2G4) | +13.5v dc |
| 7 (G3) | 0 |

*Voltage is applied only when PLATE switch is set to "P2" position.

### Internal Adjustments

If any internal indjustments must be made, the following complete procedure should be followed. Calibration requires that the panel be removed, as described at the beginning of the Maintenance Section. Locations of internal adjustments are shown in Figure 6.

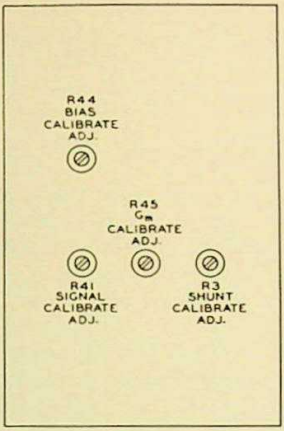



**Figure 6. Locations of internal adjustments in WT-110A.**

1. Install the card only for the 6BQ6-GT. Set the SELECTOR to "CAL".

2. Connect the direct probe of an ac voltmeter to switch contact 9 of switch section S1A (junction of R35 and R40). (NOTE: A high-impedance ac voltmeter having a full-scale accuracy of ±2% or better is required. Use the 1-volt or 1.5-volt range).

3. Adjust the CALIBRATE control for exactly 1-volt reading on the meter.

4. Set the SELECTOR to "CAL" and push the CAL/TEST switch to the "CAL" position. The WT-110A meter pointer should rest exactly at the center-scale "CAL" mark when the panel is mounted in its normal horizontal "up" position. If the reading is not correct, adjust R41 to bring the pointer to the exact center-line position.

5. Connect the dc probe of a dc voltmeter to pin 5 of any tube test socket. Adjust the Bias Calibrate control, R44, for exactly −12 volts.

6. Move the dc probe to contact 10 on switch section S1A. Turn the SELECTOR to "GAS". The meter should indicate −3.8 volts dc. If the voltage is incorrect, check value of R35.

7. Push the SPECIAL LEAKAGE/GAS switch. The measured voltage should change from −3.8 to −2.6 volts. If the voltage is incorrect, check value of R47. Disconnect the voltmeter.

The above procedure completes the internal bias-calibration adjustment.

The following procedure is used to adjust the internal gm-calibrating circuit.

NOTE: The following equipment is needed for gm calibration:

a. A high-impedance ac millivoltmeter with an accuracy of ±2% or better.

b. A Variac.

c. A filament transformer.

1. Remove the 6BQ6-GT card from the card slot and insert the card only for the type 1AX2. *Remove the power plug from the power outlet.*

2. Set the SELECTOR control to "P" on "SHORTS/LEAKAGE".

3. Connect the Variac and filament transformer in combination so the output voltage from the transformer can be adjusted over a range from 0 to 5 volts.

4. Connect the output from the transformer to the primary of the current transformer T2 in the WT-110A with the 10-ohm resistor (R36) in series. One of these connections can be made at the terminal board next to T2. The other connection can be made to the red lead connected to contact 11 of S1C.

5. Connect the direct probe of the millivoltmeter across R36. Adjust the Variac to produce a reading of 0.01 volt on the voltmeter. The meter pointer on the WT-110A should read exactly full scale. If the pointer is above or below this mark, adjust R45 (gm calibrate adj.) for exactly full-scale reading on the WT-110A. If full-scale deflection cannot be obtained, or if full-scale deflection is obtained only at the extreme end of the control range, replace rectifier CR5.

6. Remove the 1AX2 card and insert the card only for the 12AX4-GT, -GTA. The power plug should be removed from the power outlet and the voltmeter connected as in step 5.

7. Adjust the Variac for a reading of "7" on the WT-110A meter. The ac voltmeter should indicate 440 millivolts ±5%. If the reading is not 440 millivolts, adjust R3. Continue to adjust the Variac and R3 in combination until simultaneous readings of "7" on the WT-110A meter and 440 millivolts on the ac voltmeter are obtained.

**Lubrication of the Matrix**

A lubricant should be used to lubricate specified points in the matrix. Apply the lubricant to all four pressure surfaces on the cams as well as to points of the shaft bearings and the sliding plates.

# Test Equipment Service Report

Date _____ 19____

Name of instrument _____ Type No. _____ Serial No. _____

Is instrument believed to be in warranty? ☐ Yes ☐ No

Description of trouble:

What appears to be wrong? _____

_____

_____

Which controls do not work? _____

_____

Check one:

☐ Repair without quoting cost ☐ Quote cost before making repairs

Owner:

_____
Name

_____
Street

_____
City Zone State

THIS SPACE FOR DISTRIBUTORS ONLY:

☐ Ship instrument to distributor

☐ Ship instrument directly to owner

☐ Instrument is for stock

_____
Dist. Name

_____
Street

_____
City Zone State

**To avoid delay in repairs:**

1. Be sure to enclose all test leads and probes with instrument.
2. Pack carefully to avoid damage in shipment; test equipment is delicate.
3. Do *not* ship by parcel post. Use railway express or motor freight.
4. Retain a duplicate of this report. Enclose original copy with equipment.
5. Ship instrument prepaid to:

**RCA SERVICE CO., INC.**
**Return Apparatus Control**
**Building 8-2**
**Camden, New Jersey**

1CE-106A

(Cut along this line)

# Warranty

Radio Corporation of America warrants its test and measuring equipment, when properly registered, against defects in workmanship, materials, and construction under normal use and service for a period of one year from the date of original purchase. Under this warranty, our obligation is limited to repairing or replacing any defective parts.

This warranty does not apply to any instrument which has been tampered with in any way, or which has been misused or damaged by accident or negligence, or which has had the serial number removed, altered, or effaced.

RCA tubes and RCA batteries used in such equipment are covered by our standard tube or battery warranty.

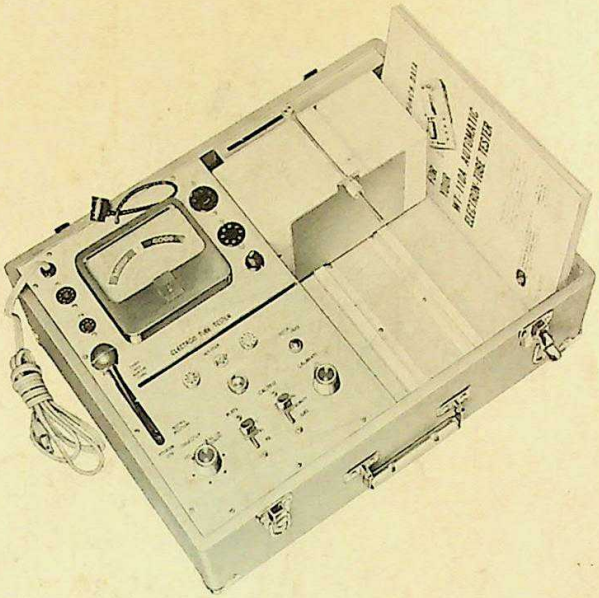
**Electron Tube Division**
**RADIO CORPORATION OF AMERICA**
**Harrison, New Jersey**

This warranty is valid only when the card enclosed with the instrument is properly filled in and returned for registration.

RCA

PRICE ONE DOLLAR

# CARD PUNCH DATA



# FOR YOUR WT-110A AUTOMATIC ELECTRON-TUBE TESTER

This booklet provides card-punching information for over 1,000 receiving and industrial tube types. It also includes data on popular foreign types in a separate listing.

RADIO CORPORATION OF AMERICA
ELECTRON TUBE DIVISION — HARRISON, N. J.
Electronic Instruments Section — Camden, N. J.

Trade Mark(s) Registered
Marca(s) Registrada(s)

Form 110AIB(2) 9-59
Printed in U.S.A.

## TESTING TUBE TYPES
## NOT INCLUDED IN THE CARD FILE

The file of punched cards supplied with your WT-110A contains testing cards for the tube-types used most frequently in radio and television receivers. As new tube types are released, card punch-data is developed and published in the RCA Radio and TV Service News, a periodical available at no cost to WT-110A owners.

RCA also furnishes, on request, separate punch-data for other tube-types which can be tested on the WT-110A. In this case however, you may have to supply a sample tube and a copy of the tube manufacturer's technical data to obtain this card-punching information.

The card punch-data is usually based upon the normal operation of the basic tube-type. For example, a tube such as a 6AK5-W would be tested with a basic 6AK5 testing card. Punch-data can sometimes be supplied to simulate unusual conditions of operation. Requests for such special data will be given reasonable consideration.

This booklet catalogs all available WT-110A card punch-data as of its release date. Supplements are planned for publication from time to time, summarizing the latest individual data releases.

# PREPARING NEW PUNCHED CARDS

To test tube-types not included in the card file, you can punch a new card quickly and easily. A master punch card (Stock No. 215426) is supplied with your WT-110A, and should be kept at the front of the card file in the instrument. In addition, you will need the package of unpunched cards (WG-325A), and the WG-326A card punch, also supplied with your instrument. A sharp pencil and a few paper clips round out the materials you will need. You can prepare a new card anywhere, in-or-away from the test bench, by carefully following the procedure outlined below:

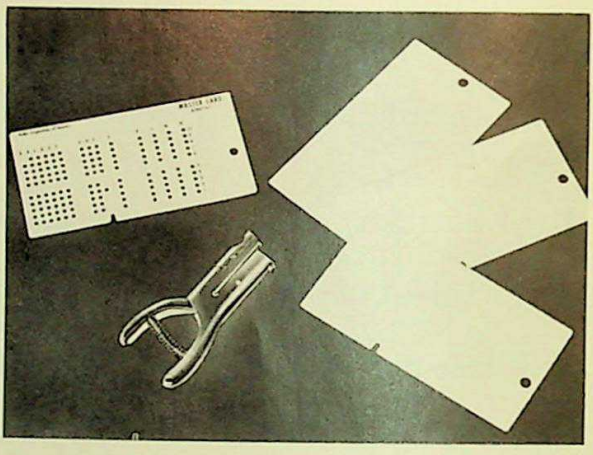


Figure 1. Items required for preparing punched cards. Master Punched Card is furnished with the WT-110A.

1. Place the master punch card on top of a blank card, with the large hole in the blank card on the right-hand side.

2. Carefully line up the bottom edges and index slots of both cards. Fasten together with three or four paper clips (see fig. 2).

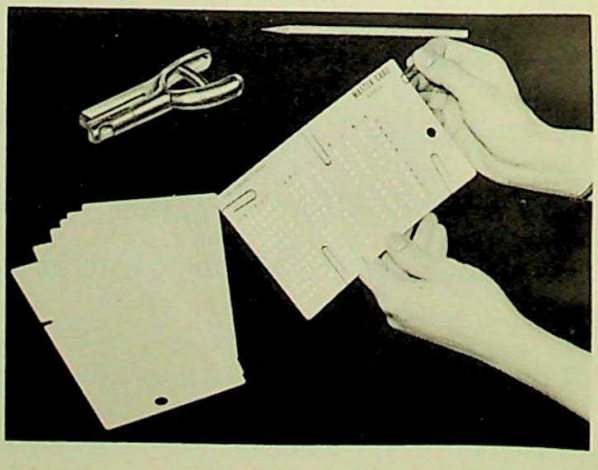


Figure 2. Line up index slots and bottoms of Master Punched Card and blank card. Clip two cards together.

3. With a sharp-pointed pencil, inscribe only those holes called for in the hole punching instructions, marking through the hole in the master card and onto the blank card (see fig. 3).

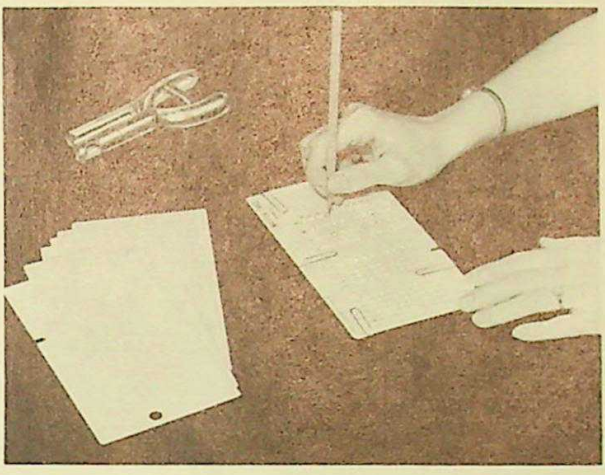


Figure 3. Use sharp-pointed pencil to inscribe hole outlines on blank card.

4. Recheck the encircled holes with the hole-punching instructions for the particular tube-type.

5. Remove the paper clips and master punch card. Punch out all of the penciled circles on the blank card with the WG-326A accessory card punch (see fig. 4). Take care to center the penciled circles exactly in the die by sighting through the hole in the top of the punch.

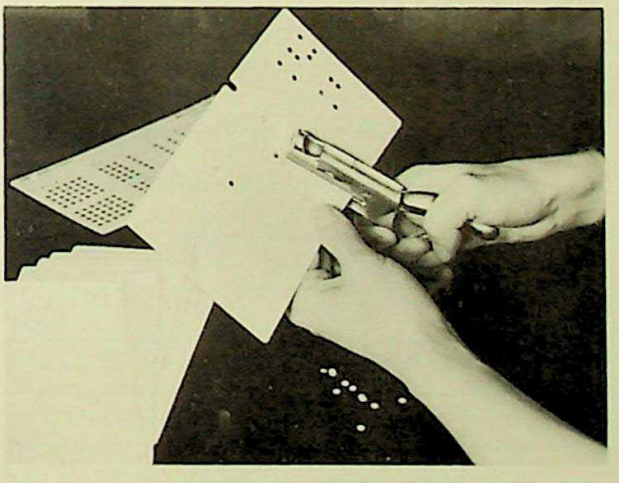


Figure 4. Center each penciled outline exactly in die on top of punch before punching hole.

6. With a lead pencil mark the tube-type number and testing instructions on the card. The lettering can be protected by spraying the finished card with a light coating of plastic.

You can add or remove cards from the WT-110A card file by unscrewing the file rod at the front of the case, and pushing the rod out through the rear eyelet. Insert the newly punched cards in their proper numerical-alphabetical order, and reinstall the rod.

SPACE BELOW FOR NEW CARD-PUNCH DATA

| | | |
|---|---|---|
| 0A2..... | A8 G1 G5 K9 L1 L6 L9 M5 M10 N5 N7 | Use WG-324A Adaptor |
| 0A3..... | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M9 N5 N8 | Use WG-324A Adaptor |
| 0B2..... | A8 G1 G5 K9 L1 L6 L9 M5 M10 N5 N8 | Use WG-324A Adaptor |
| 0B3 (VR90) ... | A8 D2 D4 D7 G5 K4 L1 L6 L8 M5 M10 N5 N8 | Regulator Tube. Use WG-324A Adapter |
| 0C2..... | A8 G1 G5 K9 L1 L6 L9 M5 M9 N5 N8 | Use WG-324A Adaptor |
| 0C3..... | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M10 N5 N8 | G1 shows short. Use WG-324A Adaptor |
| 0D3..... | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M10 N5 N7 | G1 shows short. Use WG-324A Adaptor |
| 0G3 (85A2) ... | A8 G1 K2 L1 L6 L7 M5 M9 N5 N8 | Regulator Tube. Use WG-324A Adapter. |
| 0Z4..... | A4 B7 F3 G5 K5 L5 L6 L10 M5 M6 N1 N8 | Test P1 and P2. Use WG-324A Adaptor |
| 1A3..... | A1 B7 C3 G2 K10 L3 M3 M6 N5 N6 | Reject if below 2 |
| 1A5GT..... | A2 B7 D5 E4 G3 J6 K4 L1 M5 M6 N3 N6 | |
| 1A6 ..... | A6 B1 D4 D10 E5 G2 G3 J10 K7 L1 M3 M6 N2 N6 | |
| 1A7GT..... | A2 B1 B3 B6 B7 B10 D5 G4 J9 K6 L1 M5 M6 N3 N6 | |
| 1AB6(DK96) .. | A1 B4 B7 D6 E3 E5 G2 J6 K5 L1 M5 M6 N3 N6 | |
| 1AC6 (DK92) .. | A1 B4 B7 D6 E3 E5 G2 J7 K6 L1 M5 M6 N3 N6 | |
| 1AD4..... | A5 B3 D4 E2 G1 J7 K6 L5 M5 M6 N3 N6 | |
| 1AF4..... | A1 B7 D6 F3 G2 J6 K9 L1 L6 L7 M5 M6 N3 N6 | |
| 1AG4..... | A3 B5 D4 E2 G1 J10 K10 L5 M2 M6 N1 N6 | |
| 1AG5..... Pentode Unit | A6 B4 D5 E2 G1 J7 K10 L5 M2 M6 N1 N6 | Reject if below 3 |
| 1AG5..... Diode Unit | A6 B1 B2 B4 B5 G3 K10 L3 M2 M6 N1 N6 | Reject if below 2 |
| 1AH4..... | A5 B3 D4 E2 G1 J5 K8 L5 M5 M6 N3 N6 | For gas test, see instructions |
| 1AH5 (DAF96) Pentode Unit | A7 B1 D6 E4 G5 J1 K9 L1 M5 M6 N3 N6 | |
| 1AH5 (DAF96) Diode Unit | A7 B1 G3 K10 L3 M5 M6 N3 N6 | Reject if below 3 |
| 1AJ4 (DF96)... | A7 B1 D6 E3 G2 J4 K4 L1 M5 M6 N3 N6 | |
| 1AJ5..... Diode Unit | A6 B4 G3 K10 L3 M5 M6 N3 N6 | Reject if below 2 |
| 1AJ5..... Pentode Unit | A6 B4 D5 E2 G1 J8 K10 L5 M5 M6 N3 N6 | |
| 1AK4..... | A5 B3 D4 E2 G1 J5 K9 L5 M2 M6 N1 N6 | |
| 1AX2..... | A2 B1 G10 K10 L5 M5 M6 N3 N6 | Reject if below 2 |
| 1B3GT..... | A7 B2 G10 K5 L5 M1 M6 N2 N6 | Reject if below 3 |
| 1C5GT..... | A2 B7 C7 D5 E4 G3 J9 K6 L5 M5 M6 N3 N6 | |
| 1C6 ..... | A6 B1 D4 D10 E5 G2 G3 J10 K10 L1 L6 L7 M3 M6 N2 N6 | |
| 1C7 ..... | A2 B7 D5 D10 E4 G3 G6 J10 K10 L1 L6 L7 M3 M6 N2 N6 | |
| 1D7 ..... | A2 B7 D5 D10 E4 G3 G6 J10 K8 L1 M3 M6 N2 N6 | |
| 1DN5..... Pentode Unit | A7 B1 D6 E3 G2 J5 K8 L5 M5 M6 N3 N6 | |

| | | |
|---|---|---|
| 1DN5 ..... Diode Unit | A7 B1 G4 K7 L4 M5 M6 N3 N6 | Reject if below 2 |
| 1E7 ..... | A2 B7 D4 D5 E8 F3 G6 J6 K7 L1 L6 L7 M3 M6 N2 N6 | Test P1 and P2 |
| 1F4 ..... | A1 B5 D3 E4 G2 J6 K7 L1 L6 L7 M3 M6 N2 N6 | |
| 1F6 ..... Diode Unit | A1 B6 F5 G4 K10 L3 M3 M6 N2 N6 | Test P1 and P2. Reject if below 2. |
| 1F6 ..... Pentode Unit | A1 B6 D10 E3 G2 J6 K3 L1 M3 M6 N2 N6 | |
| 1G3GT/1B3GT. | Use 1B3GT Card. | |
| 1G4 ..... | A2 B7 D5 G3 J9 K4 L1 M5 M6 N3 N6 | |
| 1G6GT..... | A2 B7 D4 D5 F3 G6 J2 K10 L5 M5 M6 N3 N6 | Test P1 and P2 |
| 1H2 ..... | A2 B9 G10 K10 L5 L6 L7 M5 M6 N3 N6 | Reject if below 2 |
| 1H5GT..... Diode Unit | A2 B1 B7 G5 K10 L3 M5 M6 N3 N6 | Reject if below 2 |
| 1H5GT..... Triode Unit | A2 B1 B7 D10 G3 J1 K10 L5 M5 M6 N3 N6 | |
| 1H6 ..... Diode Unit 1 | A2 B7 G5 K9 L3 M3 M6 N2 N6 | Reject if below 3 |
| 1H6 ..... Diode Unit 2 | A7 B2 G4 K9 L3 M3 M6 N2 N6 | Reject if below 3 |
| 1H6 ..... Triode Unit | A2 B7 D6 G3 J5 K6 L1 M3 M6 N2 N6 | |
| 1J3..... | A7 B2 G10 K10 L5 M1 M6 N2 N6 | Reject if below 3 |
| 1J5..... | A2 B7 D5 E4 G3 J10 K2 L1 M3 M6 N2 N6 | |
| 1K3 ..... | A7 B2 G10 K10 L5 M1 M6 N2 N6 | Reject if below 3 |
| 1L4 ..... | A1 B7 D6 E3 G2 J8 K6 L1 M5 M6 N3 N6 | |
| 1L6 ..... | A7 B1 D4 E3 G2 G5 G6 J6 K6 L1 M5 M6 N3 N6 | |
| 1LA4..... | A1 B8 D6 E3 G2 J7 K3 L1 M5 M6 N3 N6 | |
| 1LA6..... | A1 B8 D4 G2 G3 G5 G6 J7 K4 L1 M5 M6 N3 N6 | |
| 1LB4..... | A8 B1 D6 E3 G2 J2 K2 L1 M5 M6 N3 N6 | |
| 1LC5..... | A1 B8 C8 C4 D6 E3 G2 I6 I10 J3 K7 L5 M5 M6 N3 N6 | |
| 1LC6..... | A8 B1 D4 E3 G2 G5 G6 J4 K5 L1 M5 M6 N3 N6 | |
| 1LD5..... Diode Unit | A1 B8 G4 K10 L3 M5 M6 N3 N6 | Reject if below 1 |
| 1LD5..... Pentode Unit | A1 B8 D6 E3 G2 J6 K8 L1 M5 M6 N3 N6 | |
| 1LE3..... | A1 B8 D6 G2 J2 K3 L1 M5 M6 N3 N6 | |
| 1LG5..... | A1 B8 D6 E3 G2 J2 K6 L5 M5 M6 N3 N6 | |
| 1LH4..... Diode Unit | A1 B8 G4 K10 L3 M5 M6 N3 N6 | Reject if below 2 |
| 1LH4..... Triode Unit | A1 B8 D6 G2 J3 K10 L1 M5 M6 N3 N6 | For gas test, see instructions |

| | | |
|---|---|---|
| 1LN5..... | A1 B4 B5 B8 D6 E3 G2 J2 K7 L1 M5 M6 N3 N6 | |
| 1M3/DM70..... Card 1 | A4 B5 D1 G8 J1 L1 M5 M6 N3 N6 | Eye tube – Full illumination. Use WG-339A Adapter |
| 1M3/DM70..... Card 2 | A4 B5 D1 G8 J10 L1 M5 M6 N3 N6 | Eye tube – ¼" illumination. Use WG-339A Adapter |
| 1N3 ..... | Same as 1M3 | |
| 1N5GT..... | A2 B1 B7 D10 E4 G3 J2 K7 L1 M5 M6 N3 N6 | |
| 1Q5GT..... | A2 B7 C7 D5 E4 G3 I6 I10 J9 K5 L5 M5 M6 N3 N6 | |
| 1R5 ..... | A7 B1 B5 B6 D4 G2 G3 I6 I10 J6 K3 L1 M5 M6 N3 N6 | |
| 1S2 (DY87).... | A9 B5 G10 K10 L4 M5 M6 N3 N6 | Reject if below 4 |
| 1S4 ..... | A7 B1 B5 D3 E4 G2 G6 J9 K5 L1 L6 L7 M5 M6 N3 N6 | |
| 1S5..... Diode Unit | A7 B1 G3 K10 L3 M5 M6 N3 N6 | Reject if below 2 |
| 1S5..... Pentode Unit | A7 B1 D6 E4 G5 I6 I10 J6 K10 L1 L6 L7 M5 M6 N3 N6 | |
| 1T4 ..... | A1 B7 D6 E3 G2 J8 K7 L1 M5 M6 N3 N6 | |
| 1U4 ..... | A1 B7 D6 E3 G2 J6 K10 L1 M5 M6 N3 N6 | |
| 1U5 ..... Diode Unit | A7 B1 G4 K10 L3 M5 M6 N3 N6 | Reject if below 2 |
| 1U5 ..... Pentode Unit | A7 B1 D6 E3 G2 J5 K10 L1 L6 L7 M5 M6 N3 N6 | |
| 1V ..... | A1 B4 C3 G2 K5 L4 L6 L9 M5 M10 N2 N9 | Reject if below 4 |
| 1V2 ..... | A4 B5 G9 K9 L5 M4 M6 N5 N6 | Reject if below 2 |
| 1V6 ..... Pentode Unit | A7 B4 B5 B6 D3 E2 G1 J6 K8 L5 M5 M6 N3 N6 | |
| 1V6 ..... Triode Unit | A4 B1 B2 B3 B7 D5 G6 J8 K9 L5 M2 M6 N1 N6 | |
| 1X2A, B..... | A2 B1 G10 K5 L5 M1 M6 N2 N6 | Reject if below 3 |
| 1Z2 ..... | A4 B5 G10 K10 L4 M5 M6 N3 N6 | Reject if below 3 |
| 2A3 ..... | A4 B1 D3 G2 J10 K4 L1 L6 L8 M5 M6 N2 N6 | |
| 2A4G..... | No test – Gas Triode | |
| 2A5 ..... | A1 B6 C5 D4 E3 G2 J1 K4 L1 M4 M6 N2 N6 | |
| 2A6 ..... Diode Unit | A1 B6 C5 F3 G4 I6 I10 K10 L3 M4 M6 N2 N6 | Test P1 and P2. Reject if below 2. |
| 2A6 ..... Triode Unit | A1 B6 C5.D10 G2 I6 I10 J2 K8 L1 M4 M6 N2 N6 | For gas test, see instructions. |
| 2A7 ..... | A1 B7 C6 D5 D10 E3 G2 G4 I6 I10 J9 K9 L1 M4 M6 N2 N6 | |
| 2AF4A..... | A3 B4 C5 D2 G1 I8 I10 J1 K3 L1 L6 L7 M2 M6 N3 N6 | |
| 2B3 ..... | A2 B7 G10 I6 I10 K4 L5 M3 M6 N2 N6 | Reject if below 4 |
| 2B7 ..... Diode Unit | A1 B7 C6 F5 G4 I6 I10 K10 L3 M4 M6 N2 N6 | Test P1 and P2. Reject if below 2. |
| 2B7 ..... Pentode Unit | A1 B7 C6 D10 E3 G2 I6 I10 J6 K9 L1 M4 M6 N2 N6 | |

| | | |
|---|---|---|
| 2BN4..... | A3 B4 C1 D2 G5 I7 I8 J1 K4 L1 L6 L7 M2 M6 N3 N6 | |
| 2C51 ..... | Use 5670 Card | |
| 2CY5..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M2 M6 N3 N6 | |
| 2E5 ..... Eye Unit | A1 B6 C5 E4 F2 L1 M4 M6 N2 N6 | Shadow Max. – P1. Shadow Min. – P2. |
| 2E5 ..... Triode Unit | A1 B6 C5 D3 G2 I6 I10 J6 K10 L1 M4 M6 N2 N6 | |
| 2E24 ..... | A2 A7 B1 B8 D5 E3 G10 J9 K8 L1 L6 L7 M2 M6 N4 N6 | |
| 2E26 ..... | A2 B7 B8 C1 D5 E3 G10 I6 I7 J8 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 2E30 ..... | A3 A4 B2 B7 D1 E6 G5 J9 K4 L1 M2 M6 N4 N6 | |
| 2E31 ..... | A5 B3 D4 E2 G1 J8 K10 L5 M2 M6 N1 N6 | Reject if below 2. For gas test, see instructions |
| 2E32 ..... | Use 2E31 Card | |
| 2E35 ..... | A5 B3 D4 E2 G1 J7 K10 L5 M2 M6 N1 N6 | Reject if below 3 |
| 2E36 ..... | Use 2E35 Card. | |
| 2EA5..... | A3 B4 C2 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |
| 2EN5..... | A3 B4 C5 F2 G7 I6 I10 K7 L3 L6 L8 M3 M6 N2 N6 | Test P1 and P2. Reject if below 4 |
| 2ER5..... | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K8 L1 L6 L8 M3 M6 N2 N6 | |
| 2EV5..... | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |
| 2FH5..... | A3 B4 B6 C1 C7 D2 G5 I8 I10 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |
| 2FV6..... | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |
| 2T4 ..... | A3 B4 C5 D2 G1 I8 I9 J1 K1 L1 L6 L7 M3 M6 N2 N6 | |
| 2V2 ..... | A2 B7 G10 K9 L5 L6 L7 M3 M6 N2 N6 | Reject if below 2 |
| 2V3 ..... | A2 B7 G10 K6 L5 M4 M6 N2 N6 | Reject if below 3 |
| 2X2A..... | A1 B4 G10 I6 I7 L5 L6 L7 M2 M6 N4 N6 | Reject if below 4 |
| 3A2 ..... | A1 B2 G10 K2 L5 M2 M6 N4 N6 | Reject if below 3 |
| 3A3 ..... | A2 B7 G10 K7 L5 M2 M6 N4 N6 | Reject if below 4 |
| 3A4 ..... | A5 B1 B7 D4 E3 G2 J9 K9 L1 L6 L8 M5 M6 N3 N6 | |
| 3A5 ..... | A4 B1 B7 D3 D5 F2 G6 J7 K8 L1 L6 L7 M5 M6 N3 N6 | Test P1 and P2 |
| 3A8 ..... Diode Unit | A2 B7 G8 K10 L3 M4 M6 N2 N6 | Reject if below 3 |
| 3A8 ..... Triode Unit | A2 B7 D5 G6 J2 K10 L1 M4 M6 N2 N6 | |
| 3A8 ..... Pentode Unit | A7 B2 D10 E4 G3 J2 K7 L1 M4 M6 N2 N6 | |
| 3AF4A..... | A3 B4 C5 D2 G1 I8 I10 J1 K3 L1 L6 L7 M2 M6 N4 N6 | |
| 3AL5..... | A3 B4 C1 C5 F2 G7 I6 I10 K7 L3 L6 L8 M2 M6 N4 N6 | Test P1 and P2. Reject if below 4 |
| 3AU6..... | A3 B2 B4 C7 D1 E6 G5 I7 I9 J1 K6 L1 L6 L7 M2 M6 N4 N6 | |
| 3AV6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M6 N4 N6 | Test P1 and P2. Reject if below 4 |
| 3AV6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M2 M6 N4 N6 | For gas test, see instructions |

| | | |
|---|---|---|
| 3B2 ..... | A2 B7 G10 K9 L5 M4 M6 N2 N6 | Reject if below 4 |
| 3B4 ..... | A4 A5 B2 D3 E1 G7 J10 K7 L1 L6 L7 M2 M6 N1 N6 | |
| 3B7 ..... | A4 B8 B1 D3 D6 F7 G2 J1 K1 L1 M5 M6 N3 N6 | Test P1 and P2 |
| 3BA6..... | A3 B2 B4 C7 D1 E6 G5 I7 I10 J1 K6 L1 L6 L7 M2 M6 N4 N6 | |
| 3BC5..... | A3 B4 C2 C7 D1 E6 G5 I8 I10 J1 K6 L1 L6 L7 M2 M6 N4 N6 | |
| 3BE6..... | A3 B4 C2 C7 D1 G5 G6 I6 I10 J1 K3 L1 L6 L7 M2 M6 N4 N6 | |
| 3BN4..... | A3 B4 C1 D2 G5 I7 I8 J1 K4 L1 L6 L7 M2 M6 N4 N6 | |
| 3BN6..... | A3 B4 C1 D2 G5 G6 G7 J1 K8 L5 L6 L7 M2 M6 N4 N6 | |
| 3BU8..... | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K7 L1 M2 M6 N4 N6 | Test P1 and P2 |
| 3BY6..... | A3 B4 C2 D1 D7 E6 G5 I6 I10 J5 K3 L1 M2 M6 N4 N6 | |
| 3BZ6..... | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K9 L1 L6 L8 M2 M6 N4 N6 | |
| 3C2 ..... | A2 B7 G10 K1 L5 M2 M6 N4 N6 | Reject if below 4 |
| 3C6/XXB ..... | A1 A8 B7 D4 D5 F3 G6 J2 K3 L1 M5 M6 N3 N6 | Test P1 and P2 |
| 3CB6..... | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K9 L1 L6 L8 M2 M6 N4 N6 | |
| 3CE5..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M2 M6 N4 N6 | |
| 3CF6..... | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K9 L1 L6 L8 M2 M6 N4 N6 | |
| 3CS6 ..... | A3 B4 C2 D1 D7 E6 G5 I6 I10 J6 K5 L1 M2 M6 N4 N6 | |
| 3CS6 ..... Grid 1 Test | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K8 L1 M4 M6 N2 N6 | Reject if below 4 |
| 3CS6 ..... Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 I6 I7 J1 K10 L1 M4 M6 N2 N6 | Reject if below 4 |
| 3CY5..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M2 M6 N4 N6 | |
| 3D6/1299 ..... | A1 A8 B7 D6 E3 G2 J7 K4 L1 L6 L7 M5 M6 N3 N6 | |
| 3DK6..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K2 L1 L6 L7 M2 M6 N4 N6 | |
| 3DT6..... | A3 B4 C2 D1 D7 E6 G5 I6 I10 J4 K7 L1 M2 M6 N4 N6 | Reject if below 3. For gas test, see instructions |
| 3EA5..... | A3 B4 C2 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M4 M6 N2 N6 | |
| 3ER5..... | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K8 L1 L6 L8 M4 M6 N2 N6 | |
| 3EV5..... | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K2 L1 L6 L7 M4 M6 N2 N6 | |
| 3FH5..... | A3 B4 B6 C1 C7 D2 G5 I8 I10 J1 K2 L1 L6 L7 M4 M6 N2 N6 | |
| 3LF4..... | A1 A8 B7 D6 E3 G2 J9 K5 L1 L6 L7 M5 M6 N3 N6 | |
| 3Q4 ..... | A1 A7 B5 D3 E4 G2 G6 J9 K6 L1 L6 L7 M5 M6 N3 N6 | |
| 3Q5GT/G ..... | A7 B2 B8 D5 E4 G3 J9 K3 L1 M5 M6 N3 N6 | |
| ★ 3S4 ..... | A1 B7 D3 E4 G2 J10 K4 L1 M2 M6 N4 N6 | |
| 3V4 ..... | A1 A7 B5 D6 E3 G2 J9 K6 L1 L6 L7 M5 M6 N3 N6 | |
| 4AU6..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K6 L1 L6 L7 M1 M6 N4 N6 | |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 4BA6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K6 L1 L6 L7 M4 M6 N1 N6 | |
| 4BC5..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M1 M6 N4 N6 | |
| 4BC8..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I8 I9 J1 K4 L1 L6 L7 M1 M6 N4 N6 | Test P1 and P2 |
| 4BN4..... | A3 B4 C1 C6 D2 G5 I7 I8 J1 K4 L1 L6 L7 M4 M6 N1 N6 | |
| 4BN6..... | A3 B4 C1 D2 G5 G6 G7 J1 K8 L5 L6 L7 M1 M6 N4 N6 | |
| 4BQ7A..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M1 M6 N4 N6 | Test P1 and P2 |
| 4BS8..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I8 I9 J1 K3 L1 L6 L7 M1 M6 N4 N6 | Test P1 and P2 |
| 4BU8..... | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K7 L1 M1 M6 N4 N6 | Test P1 and P2 |
| 4BX8..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I6 I10 J4 K2 L1 L6 L7 M1 M6 N4 N6 | Test P1 and P2 |
| 4BY6..... | A3 B4 C2 D1 D7 E6 G5 I6 I10 J5 K8 L1 L6 L7 M1 M6 N4 N6 | |
| 4BZ6..... | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K6 L1 L6 L8 M1 M6 N4 N6 | |
| 4BZ7..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I8 I9 J1 K4 L1 L6 L7 M1 M6 N4 N6 | Test P1 and P2 |
| 4BZ8..... | A4 B5 C3 C8 D2 D7 F1 G6 I7 I9 J1 K2 L1 L6 L7 M4 M6 N1 N6 | Test P1 and P2 |
| 4CB6..... | A3 B4 C2 C7 D1 E6 G5 I6 I8 J1 K9 L1 L6 L8 M1 M6 N4 N6 | |
| 4CE5..... | A3 B4 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M4 M6 N1 N6 | |
| * 4CS6..... | A3 B4 B7 C2 D1 G5 G6 I6 I10 J7 K8 L1 L6 L7 M1 M6 N4 N6 | |
| * 4CS6..... Grid 1 Test | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K8 L1 M4 M6 N1 N6 | Reject if below 4 |
| 4CS6..... Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 I6 I7 J1 K10 L1 M4 M6 N1 N6 | Reject if below 4 |
| 4CY5..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M2 M6 N5 N6 | |
| 4DE6..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M1 M6 N5 N6 | |
| 4DK6..... | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K7 L1 L6 L8 M4 M6 N1 N6 | |
| 4DT6..... | A3 B4 C2 D1 D7 E6 G5 I6 I10 J4 K7 L1 M1 M6 N4 N6 | Reject if below 3 For gas test, see instructions |
| 4ES8..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I8 J1 K2 L1 L6 L7 M4 M6 N1 N6 | Test P1 and P2 |
| 4EW6..... | A3 B4 B7 C2 D1 E6 G5 I7 I9 J1 K7 L1 L6 L8 M1 M6 N4 N6 | For gas test, see instructions |
| 5A6..... | A4 B5 C3 C8 D7 E6 G1 J10 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5AM8..... Diode Unit | A4 B5 C7 G8 K8 L3 L6 L8 M1 M6 N5 N6 | Reject if below 3 |
| 5AM8..... Pentode Unit | A4 B5 C1 C9 D2 E3 G6 I6 I8 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5AN8..... Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5AN8..... Triode Unit | A4 B5 C3 D2 G1 I6 I8 J6 K3 L1 M1 M6 N5 N6 | |

* *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 5AQ5..... | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M1 M6 N5 N6 | |
| 5AR4..... | A2 B8 F4 G6 K6 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5AS4..... | A2 B8 F6 G4 K1 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2 Reject if below 4 |
| 5AS8..... Diode Unit | A4 B5 C8 G6 I6 I10 K3 L3 L6 L7 M1 M6 N5 N6 | Reject if below 2 |
| 5AS8..... Pentode Unit | A4 B5 C3 C7 D2 E1 G9 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5AT8..... Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I6 I7 J1 K6 L1 L6 L7 M1 M6 N5 N6 | |
| 5AT8..... Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5AU4..... | A2 B8 F4 G6 K1 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5AV8..... Pentode Unit | A4 B5 C7 D6 E8 G9 I6 I7 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5AV8..... Triode Unit | A4 B5 C1 D2 G3 I6 I10 J6 K8 L1 L6 L7 M1 M6 N5 N6 | |
| 5AW4..... | A2 B8 F4 G6 K1 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5AZ4..... | A2 B8 F4 G6 K7 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4 |
| 5B8..... Pentode Unit | A4 B5 C1 C2 C7 D6 E8 G9 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5B8..... Triode Unit | A4 B5 C1 D2 G3 I6 I10 J6 K8 L1 L6 L7 M1 M6 N5 N6 | |
| 5BE8..... Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I7 I10 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5BE8..... Triode Unit | A4 B5 C3 D1 G2 I7 I10 J1 K2 L1 L6 L7 M1 M6 N5 N6 | |
| 5BK7A..... | A4 B5 C3 C8 C9 D2 D7 F1 G6 I7 I10 J1 K1 L1 L6 L7 M1 M6 N5 N6 | Test P1 and P2 |
| 5BQ7A..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M1 M6 N5 N6 | Test P1 and P2 |
| 5BR8..... Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5BR8..... Triode Unit | A4 B5 C3 D1 G2 I7 I10 J1 K2 L1 L6 L7 M1 M6 N5 N6 | |
| 5BT8..... Diode Unit | A4 B5 C3 F1 G2 K9 L3 M1 M6 N5 N6 | Test P1 and P2. Reject if below 4 |
| 5BT8..... Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5BW8..... Pentode Unit | A4 B5 C7 D6 E8 G9 I7 I10 J1 K6 L1 L6 L7 M5 M6 N1 N6 | |
| 5BW8..... Diode Unit | A4 B5 C2 F1 G3 I6 I10 K7 L3 L6 L8 M5 M6 N1 N6 | Test P1 and P2. Reject if below 4 |
| 5BZ7..... | A4 B5 B9 C3 C8 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M4 M10 N1 N9 | Test P1 and P2 |
| 5CG4..... | A2 B8 F4 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5CG8..... Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5CG8..... Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5CL8..... Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 L1 L6 L7 M1 M6 N5 N6 | |
| 5CL8..... Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K1 L1 L6 L7 M1 M6 N5 N6 | |
| 5CM6..... Triode Unit | A4 B5 C7 D3 E1 G9 I6 I10 J8 K8 L1 L6 L7 M5 M6 N1 N6 | |
| 5CM6..... Pentode Unit | A4 B5 C3 D2 E7 G6 I7 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |

| | | |
|---|---|---|
| 5CM8..... Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5CM8..... Triode Unit | A4 B5 C8 D9 G1 I6 I10 J2 K6 L1 M1 M6 N5 N6 | For gas test, see instructions |
| 5CQ8..... Tetrode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5CQ8..... Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K1 L1 L6 L7 M1 M6 N5 N6 | |
| 5CR8..... Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K10 L1 L6 L8 M5 M6 N1 N6 | |
| 5CR8..... Pentode Unit | A4 B5 C3 D2 E7 G6 I7 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5CZ5..... | A4 B5 C7 C8 D3 D6 E1 G9 I6 I10 J8 K1 L1 M1 M6 N5 N6 | |
| 5DH8..... Triode Unit | A4 B5 C3 D1 G2 J1 K6 L1 L6 L7 M4 M10 N1 N9 | |
| 5DH8..... Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I7 I10 J1 K7 K8 L1 L6 L8 M4 M10 N1 N9 | |
| 5EA8..... Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N1 N9 | |
| 5EA8..... Triode Unit | A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M5 M10 N1 N9 | |
| 5EH8..... Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I10 J2 K4 L1 L6 L7 M5 M10 N1 N9 | |
| 5EH8..... Triode Unit | A4 B5 C1 C6 D2 G3 I6 I10 J2 K8 L1 L6 L8 M5 M10 N1 N9 | |
| 5EU8..... Triode Unit | A4 B5 C6 D2 G3 I8 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5EU8..... Pentode Unit | A4 B5 C8 D7 E9 G1 I7 I9 J1 K4 L1 L6 L7 M5 M6 N1 N6 | |
| 5GH8..... Triode Unit | A4 B5 C8 D9 G1 I8 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5GH8..... Pentode Unit | A4 B5 C7 D2 E3 G6 I8 I10 J1 K5 L1 L6 L7 M5 M6 N1 N6 | |
| 5J6..... ..... | A3 B4 C7 D5 D6 F1 G2 I7 I9 J1 K5 L1 L6 L7 M1 M6 N5 N6 | Test P1 and P2* |
| 5R4GY..... | A2 B8 F6 G4 K4 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5T4 ..... | A2 B1 B8 F6 G4 K1 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4 |
| 5T8 ..... Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M1 M6 N5 N6 | Test P1, P2 and P3. Reject if below 4 |
| 5T8 ..... Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M1 M6 N5 N6 | For gas test, see instructions |
| 5U4G, GB..... | A2 B8 F4 G6 K1 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5U8 ..... Pentode Unit | A4 B5 C7 D2 E3 G6 I7 I10 J1 K6 L1 L6 L7 M1 M6 N5 N6 | |
| 5U8 ..... Triode Unit | A4 B5 C8 D9 G1 I6 I9 J1 K3 L1 L6 L7 M1 M6 N5 N6 | |
| 5V3 ..... | A2 B8 F4 G6 I7 I10 K9 L4 L6 L10 M3 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5V4G..... | A2 B8 F4 G6 I6 I10 K7 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5V6GT..... | A2 B7 C8 D5 E4 G3 I6 I7 J1 K1 L1 M1 M6 N5 N6 | |
| 5W4 ..... | A2 B8 F4 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5X4G..... | A7 B8 F3 G5 K2 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5X8 ..... Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I7 J1 K6 L1 L6 L7 M1 M6 N5 N6 | |
| 5X8 ..... Triode Unit | A4 B5 C6 D2 G3 I7 I9 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5Y3G, GT..... | A2 B8 F4 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |

| | | |
|---|---|---|
| 5Y4G, GT..... | A7 B8 F3 G5 K7 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5Z3 ..... | A1 B4 F2 G3 K3 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5Z4 ..... | A2 B1 B8 F4 G6 K8 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6A3 ..... | A1 B4 D3 G2 J10 K4 L1 L6 L8 M4 M10 N2 N9 | |
| 6A7, S..... | A1 B7 C6 D5 G2 G3 G4 G10 I6 I10 J7 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6A8, G, GT.... | A2 B1 B7 B8 D5 G3 G4 G6 G10 I6 I10 J7 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6AB4..... | A4 B2 B3 C7 D6 G1 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6A6 ..... | A1 B7 C4 D3 D5 F2 G6 I6 I10 J4 K7 L1 M3 M10 N1 N9 | Test P1 and P2 |
| 6AB5/6N5..... | A1 B6 C5 D3 E4 G2 I6 I10 J2 K10 L1 M5 M10 N2 N9 | Triode Test – P1.<br>Shadow Min. – P1.<br>Shadow Max. – P2. |
| 6AB7/1853.... | A2 B1 B3 B7 C5 D4 E6 G8 I6 I10 J3 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AC5..... | A2 B7 C8 D5 G3 I7 I9 J1 K9 L1 M3 M10 N1 N9 | |
| 6AC7..... | A2 B1 B7 C3 C5 D4 E6 G8 I8 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6AD4..... | A3 B6 C5 D1 G8 J1 K5 L1 M5 M10 N2 N9 | |
| 6AD7GT ..... Pentode Unit | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 M3 M10 N1 N9 | |
| 6AD7GT ..... Triode Unit | A2 B7 C8 D1 G6 I6 I10 J1 K10 L1 M3 M10 N1 N9 | |
| 6AF3..... | A4 B5 C10 G9 I6 I10 K5 L4 L6 L10 M4 M10 N1 N9 | |
| 6AF4, A..... | A3 B4 C5 D2 G1 I8 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6AG5..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6AG7..... | A7 B1 B2 B3 C5 D4 E6 G8 I6 I10 J4 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6AH4GT ..... | A7 B2 C8 D1 G5 J9 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AH6..... | A4 B2 B3 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6AJ4 ..... | A7 B8 C2 D1 D3 D4 D6 D9 G5 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6AJ5 ..... | A3 B4 C2 C7 D1 E6 G5 J1 K8 L2 M5 M10 N2 N9 | |
| 6AJ8/ECH81 .. Triode Unit | A4 B1 B2 B5 B6 B7 C3 D9 G8 I8 I10 J1 K7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6AJ8/ECH81 .. Heptode Unit | A4 B5 B7 B8 B9 C3 D2 E1 G6 I6 I9 J4 K3 L1 M5 M10 N2 N9 | |
| 6AK4..... | A3 B6 C5 D1 G8 I6 I10 J7 K2 L1 M5 M10 N2 N9 | |
| 6AK5..... | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6AK6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J8 K5 L1 M5 M10 N2 N9 | |
| 6AK8/EABC80. | Use 6T8 Cards | |
| 6AL5..... | A3 B4 C1 C5 F2 G7 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |

| | | |
|---|---|---|
| 6AL7..... | No test possible | |
| 6AM4..... | A7 B8 C2 D1 D3 D4 D6 D9 G5 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6AM8, A ..... Diode Unit | A4 B5 C7 G8 I6 I10 K7 L4 L6 L10 M5 M10 N2 N9 | Reject if below 3 |
| 6AM8, A ..... Pentode Unit | A4 B5 C1 C9 D2 E3 G6 I8 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6AN4..... | A3 B4 C5 D2 G1 G7 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6AN5..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J8 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6AN6..... Diode Unit | A7 B1 C6 F2 G3 K7 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6AN6..... Diode Unit | A7 B1 C6 F4 G5 K7 L3 M5 M10 N2 N9 | Test P1 and P2 Reject if below 3 |
| 6AN8..... Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6AN8..... Triode Unit | A4 B5 C3 D2 G1 I6 I10 J6 K3 L1 M5 M10 N2 N9 | |
| 6AQ5, A ..... | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6AQ6..... Diode Unit | A3 B4 C2 F6 G5 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6AQ6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6AQ7GT ..... Diode Unit | A7 B8 C2 F1 G3 I6 I10 K10 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 1 |
| 6AQ7GT ..... Triode Unit | A7 B8 C6 D4 G5 I6 I10 J2 K8 L1 M5 M10 N2 N9 | |
| 6AQ8 (ECC85). | A4 B5 C3 C8 D2 D7 F1 G6 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. For gas test, see instructions |
| 6AR5..... | A3 B4 C2 D1 E6 G5 I6 I10 J9 K5 L1 M5 M10 N2 N9 | |
| 6AR6..... | A6 B8 C1 D7 E5 G3 I8 I9 J9 K7 L1 L6 L7 M4 M10 N2 N9 | |
| 6AS5 ..... | A3 B4 C1 D2 E6 G7 I9 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| * 6AS6 ..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J4 K1 L1 M5 M10 N2 N9 | |
| 6AS6 ..... Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 J2 K9 K10 L1 M5 M10 N2 N9 | |
| 6AS7G..... | A7 B8 C3 C6 D1 D4 F2 G5 J1 K1 L5 L6 L9 M3 M10 N2 N9 | Test P1 and P2 |
| 6AS8 ..... Diode Unit | A4 B5 C8 G6 I6 I10 K3 L3 L6 L7 M5 M10 N2 N9 | Reject if below 4 |
| 6AS8 ..... Pentode Unit | A4 B5 C3 C7 D2 E1 G9 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6AT6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6AT6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6AT8, A ..... Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AT8, A ..... Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6AU4GT, GTA. | A7 B8 C3 G5 I6 I10 K4 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4. |
| 6AU5GT ..... | A2 B7 C3 D1 E8 G5 I6 I9 J10 K6 L1 L6 L7 M4 M10 N2 N9 | |
| 6AU6..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AU8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K8 L1 L6 L8 M5 M10 N2 N9 | |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 6AU8..... Triode Unit | A4 B5 C1 D2 G3 I8 I9 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AV5GA, GT .. | A2 B7 C3 D1 E8 G5 I7 I9 J10 K6 L1 L6 L7 M4 M10 N2 N9 | |
| 6AV6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6AV6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6AW8, A ..... Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I7 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6AW8, A ..... Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K10 L1 L6 L8 M5 M10 N2 N9 | For gas test, see instructions |
| 6AX4GT ..... | A7 B8 C3 G5 I6 I10 K1 L4 L6 L9 M4 M10 N2 N9 | Reject if below 3 |
| 6AX5GT ..... | A2 B7 C8 F3 G5 I6 I10 K6 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6AX8..... Pentode Unit | A4 B5 C7 D2 E3 G6 I8 I10 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AX8..... Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6AZ8..... Pentode Unit | A4 B5 C3 D6 E2 G1 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6AZ8..... Triode Unit | A4 B5 C7 D9 G8 I6 I10 J6 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6B4G..... | A2 B7 D5 G3 J10 K4 L1 L6 L8 M3 M10 N1 N9 | |
| 6B8, G ..... Diode Unit | A2 B1 B7 C8 F4 G5 I6 I10 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2 |
| 6B8, G ..... Pentode Unit | A2 B1 B7 C8 D10 E6 G3 I6 I10 J5 K8 L1 M5 M10 N2 N9 | |
| 6BA5..... | A3 B6 C8 D1 E7 G5 J1 K4 L1 M5 M10 N2 N9 | |
| 6BA6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BA7..... | A4 B5 C3 D2 G1 G6 G7 G9 I6 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6BA8..... Triode Unit | A4 B5 C1 D2 G3 I6 I10 J7 K4 L1 M5 M10 N2 N9 | |
| 6BA8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I7 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6BC4..... | A4 B5 C6 D2 G1 I8 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6BC5..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BC7..... | A4 B5 C1 C7 C9 F6 G8 H2 I6 I10 K6 L3 L6 L8 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 4 |
| 6BC8..... | A4 B5 C3 C8 C9 D2 D7 F1 G6 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | Test P1 and P2 |
| 6BD5GT ..... | A2 B7 C3 D1 E8 G5 I6 I10 J8 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 6BD6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K3 L1 M5 M10 N2 N9 | |
| 6BE6..... | A3 B4 C2 C7 D1 G5 G6 I6 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6BF5..... | A3 B4 C2 D1 E6 G5 I6 I10 J9 K2 L1 L6 L7 M4 M10 N2 N9 | |
| 6BF6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6BF6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J7 K8 L1 M5 M10 N2 N9 | |
| 6BF7..... | A3 B6 C4 C5 D2 D7 F1 G8 I7 I9 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6BG6G..... | A2 B7 C3 D5 E8 G10 I6 I10 J9 K10 L1 L6 L8 M5 M10 N2 N9 | |

| | | |
|---|---|---|
| 6BG7..... | A3 B6 C4 C5 D2 D7 F1 G8 I8 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6BH6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6BH8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6BH8..... Triode Unit | A4 B5 C1 D2 G3 I6 I10 J7 K3 L1 M5 M10 N2 N9 | |
| 6BJ6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6BJ7..... | A4 B3 B5 C1 C7 C9 F6 G8 H2 I6 I10 K7 K8 L3 L6 L8 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 4 |
| 6BJ8..... Diode Unit | A4 B5 C2 C3 F1 G6 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6BJ8..... Triode Unit | A4 B5 C9 D8 G7 I6 I10 J7 K5 L1 M5 M10 N2 N9 | |
| 6BK4..... | A2 B7 C1 G5 G10 K9 L3 M5 M10 N2 N9 | Emission Test only. Reject if below 4 |
| 6BK5..... | A4 B5 C6 D3 E8 G1 I6 I10 J5 K3 L1 L6 L7 M4 M10 N2 N9 | |
| 6BK7A..... | A4 B5 C3 C8 C9 D2 D7 F1 G6 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6BL4..... | A7 B8 C3 G5 I6 I10 K2 L4 L6 L10 M3 M10 N2 N9 | Reject if below 4 |
| 6BL7GT ..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J7 K6 L1 L6 L7 M4 M10 N2 N9 | Test P1 and P2 |
| 6BM8 (ECL82). Triode Unit | A4 B5 C8 D1 G9 J2 K7 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6BM8 (ECL82). Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I7 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6BN4..... | A3 B4 C1 C6 D2 G5 I7 I8 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6BN5 (EL85).. | A4 B5 C3 C6 D1 E9 G7 J1 K2 L1 M5 M10 N2 N9 | |
| 6BN6..... | A3 B4 C1 D2 G5 G6 G7 J1 K8 L5 L6 L7 M5 M10 N2 N9 | |
| 6BN8..... Diode Unit | A4 B5 C2 C3 F1 G6 I6 I10 K4 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6BN8..... Triode Unit | A4 B5 C9 D8 G7 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | For gas test, see instructions |
| 6BQ5/EL84 ... | A4 B5 C3 D2 E9 G7 I6 I10 J6 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6BQ6GT, GTB/6CU6.. | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| 6BQ7, A ..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | Test P1 and P2 |
| 6BR5/EM80 .. | A4 B5 C2 D1 E3 E8 E9 G7 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Amp. Sec. Test on P1 Position. Shadow Min. – P1 Position. Shadow Max. – P2 or P3 Position. • |
| 6BR8..... Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6BR8..... Triode Unit | A4 B5 C3 D1 G2 I6 I9 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6BS8..... | A4 B5 C3 C8 D2 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6BT8..... Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |

| | | |
|---|---|---|
| 6BT8..... Diode Unit | A4 B5 C3 F1 G2 K9 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6BU8..... | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K7 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 6BV8..... Diode Unit | A4 B5 C7 C8 F9 G6 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6BV8..... Triode Unit | A4 B5 C1 D2 G3 J3 K1 L1 M5 M10 N2 N9 | |
| 6BW4..... | A4 B5 C9 F1 G7 I6 I10 K5 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6BW8..... Pentode Unit | A4 B5 C7 D6 E8 G9 I7 I10 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BW8..... Diode Unit | A4 B5 C2 F1 G3 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6BX4..... | A3 B4 C7 F1 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6BX7GT ..... | A7 B8 C3 C6 D1 D4 F2 G5 J5 K5 L1 L6 L7 M4 M10 N2 N9 | Test P1 and P2 |
| 6BY5GA ..... | A2 B7 C1 C8 F4 G5 I6 I10 K3 L4 L6 L9 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6BY6..... | A3 B4 C2 D1 D7 E6 G5 I6 I10 J5 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6BY7 (EF85) .. | A4 B5 C1 C3 D2 E8 G7 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BY8..... Diode Unit | A4 B5 C3 G6 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Reject if below 4 |
| 6BY8..... Pentode Unit | A4 B5 C2 C9 D1 E8 G7 I7 I9 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BZ6..... | A3 B4 C2 C7 D1 E6 G5 I6 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6BZ7..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6BZ8..... | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I9 J1 K2 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6C4 ..... | A3 B4 C7 D6 G1 I6 I10 J1 K1 L1 M5 M10 N2 N9 | |
| 6C5, GT ..... | A7 B1 B2 C8 D5 G3 I6 I10 J6 K6 L1 M5 N10 N2 N9 | |
| 6C6 ..... | A1 B6 C4 C5 D10 E3 G2 I6 I10 J6 K8 L1 M5 M10 N2 N9 | |
| 6C8G..... | A2 B7 C4 C8 D5 D10 F3 G6 I6 I10 J4 K7 K8 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 6CA4 (EZ81) .. | A4 B5 C3 F7 G1 I6 I10 K7 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6CA5..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J5 K1 L1 L6 L7 M10 M3 N1 N9 | |
| 6CA7/EL34... | A2 B1 B7 C8 D5 E4 G3 I6 I10 J8 K7 L1 L6 L8 M4 M10 N2 N9 | |
| 6CB5, A ..... | A2 B7 C3 D4 E1 G10 I8 I9 J10 K3 L1 L6 L7 M3 M10 N2 N9 | |
| 6CB6..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CD6G, GA.... | A2 B7 C3 D5 E8 G10 I6 I7 J10 K5 L1 L6 L7 M3 M10 N2 N9 | |
| 6CE5..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CF6..... | A3 B4 C2 C7 D1 E6 G5 I6 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| ★ 6CG7..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J3 K1 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 6CG8A..... Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I7 I8 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6CG8A..... Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 6CH8..... Pentode Unit | A4 B5 C6 D7 E3 G2 I7 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CH8..... Triode Unit | A4 B5 C1 D8 G9 I6 I10 J6 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6CK4..... | A2 B7 C8 D1 G5 I6 I10 J10 K6 K7 L1 L6 L7 M4 M10 N9 N2 | |
| 6CL5..... | A2 B7 C3 D4 E8 G10 I6 I7 J1 K5 L1 L6 L7 M4 M10 N2 N9 | |
| 6CL6..... | A4 B5 C1 C7 D2 E3 G6 I6 I10 J4 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6CL8..... Tetrode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6CL8..... Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6CM6..... | A4 B5 C7 D3 E1 G9 I6 I10 J8 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6CM7..... Triode Unit 1 | A4 B5 C3 D7 G6 I6 I10 J6 K5 L1 M5 M10 N2 N9 | |
| 6CM7..... Triode Unit 2 | A4 B5 C9 D8 G1 I6 I10 J6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6CM8..... Pentode Unit | A4 B5 C3 C8 D2 E7 G6 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CM8..... Triode Unit | A4 B5 C8 D9 G1 I6 I10 J2 K7 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6CN7..... Diode Unit | A4 B5 C3 F1 G2 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6CN7..... Triode Unit | A4 B5 C6 D7 G8 I6 I10 J2 K7 L1 M5 M10 N2 N9 | For gas test, see instructions |
| * 6CQ8..... Tetrode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| * 6CQ8..... Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6CR6..... Diode Unit | A3 B4 C1 G2 K10 L3 M5 M10 N2 N9 | Reject if below 3 |
| 6CR6..... Pentode Unit | A3 B4 C1 D7 E6 G5 I6 I10 J4 K4 L1 M5 M10 N2 N9 | |
| 6CR8..... Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K10 L1 L6 L8 M3 M10 N1 N9 | |
| 6CR8..... Pentode Unit | A4 B5 C3 D2 E7 G6 I7 I10 J1 K3 L1 L6 L7 M3 M10 N1 N9 | |
| * 6CS6..... | A3 B4 B7 C2 D1 G5 G6 I6 I10 J7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| * 6CS6..... Grid 1 Test | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K8 L1 M5 M10 N2 N9 | Reject if below 4 |
| 6CS6..... Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 I6 I7 J1 K10 L1 M5 M10 N2 N9 | Reject if below 4 |
| 6CS7..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J6 K6 L1 M5 M10 N2 N9 | |
| 6CS7..... Triode Unit 2 | A4 B5 C9 D3 G1 I6 I10 J7 K1 L1 M5 M10 N2 N9 | |
| 6CU5..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K2 L1 L6 L7 M4 M10 N2 N9 | |
| 6CU6, 6BQ6GT, GTB..... | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| * 6CU8..... | Should be corrected to include missing hole at C1. | |
| * 6CU8..... Pentode Unit | A4 B5 C1 C6 D7 E3 G2 I7 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| * 6CU8..... Triode Unit | A4 B5 C1 D8 G9 I6 I10 J6 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6CW5 (EL86).. | A4 B5 C3 D2 E9 G7 I6 I10 J9 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6CX8..... Triode Unit | A4 B5 B6 B7 B8 B9 C1 D2 G3 I6 I7 J1 K6 K7 L1 L6 L7 M3 M10 N1 N9 | |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 6CX8..... Pentode Unit | A4 B1 B2 B3 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6CY5..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6CY7..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K7 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6CY7..... Triode Unit 2 | A4 B5 C9 D3 G1 J9 K6 L1 L6 L7 M5 M10 N2 N9 | For gas test, see instructions |
| 6CZ5..... | A4 B5 C7 D3 E1 G9 I6 I9 J8 K9 K10 L1 L6 L8 M5 M10 N2 N9 | |
| 6CZ5..... | A4 B5 C7 D3 E1 G9 I9 I10 J1 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6D6 ..... | A1 B6 C4 C5 D10 E3 G2 I6 I10 J6 K7 L1 M5 M10 N2 N9 | |
| 6D8 ..... | A2 B7 C8 D5 G3 G4 G6 G10 I6 I10 J7 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6DA4..... | A7 B8 C3 G5 I6 I10 K4 L4 L6 L10 M4 M10 N1 N9 | Reject if below 3 |
| 6DA6/EF89 ... | A4 B5 B9 C3 D2 E8 G7 I6 I10 J4 K6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6DB5..... | A4 B5 C2 D3 E1 G9 I6 I7 J1 K8 L1 L6 L8 M3 M10 N1 N9 | |
| 6DC6..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6DE4..... | A7 B8 C3 G5 I6 I10 K7 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4 |
| 6DE6..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6DE7..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M4 M10 N2 N9 | |
| 6DE7..... Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K9 L1 L6 L8 M4 M10 N2 N9 | |
| 6DG6GT ..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M4 M10 N2 N9 | |
| * 6DJ8 (ECC88) . | A4 B5 C3 C8 D2 D7 F1 G6 I9 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6DK6..... | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K7 L1 L6 L8 M4 M10 N2 N9 | |
| 6DN6..... | A7 B1 B2 C3 D5 E8 G10 I8 I10 J10 K3 L1 L6 L7 M3 M10 N2 N9 | |
| 6DN7..... Triode Unit 1 | A8 B7 C6 D4 G5 I6 I10 J6 K5 L1 M3 M10 N1 N9 | |
| 6DN7..... Triode Unit 2 | A8 B7 C3 D1 G2 I10 I6 J8 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 6DQ5..... | A2 B7 C3 C6 D1 D5 E4 E8 G10 J10 K4 L1 L6 L7 M3 M10 N2 N9 | |
| 6DQ5..... | A2 B7 C3 D1 E4 G10 I6 I8 J10 K4 L1 L6 L7 M4 M10 N2 N9 | |
| 6DQ6A..... | A7 B2 C8 D5 E4 G10 I7 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| 6DR7..... Triode Unit 1 | A4 B5 C8 D7 G6 J1 K6 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6DR7..... Triode Unit 2 | A4 B5 C9 D2 G1 J7 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6DS5 ..... | A3 B4 C2 D1 E6 G5 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6DT5..... | A4 B5 C7 D3 E1 G9 I6 I10 J9 K6 L1 L6 L7 M4 M10 N2 N9 | |
| 6DT6..... | A3 B4 C2 D1 D7 E6 G5 I6 I10 J4 K7 L1 M5 M10 N2 N9 | For gas test, see instructions. Reject if below 3 |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 6DT8..... | A4 B5 C3 C8 D2 D7 F1 G6 J1 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6DW5..... | A4 B5 C7 D3 D6 E1 G9 I6 I10 J8 K1 L1 L6 L7 M4 M10 N2 N9 | |
| 6DZ8..... Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M5 M10 N2 N9 | |
| 6DZ8..... Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6E5..... | A1 B6 C5 D3 E4 G2 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Triode Test – P1. Shadow Min. – P1. Shadow Max.– P2 |
| 6EA5..... | A3 B4 C2 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6EA7..... Triode Unit 1 | A7 B8 C6 D4 G5 J2 K10 L1 L6 L7 M5 M10 N2 N9 | For gas test, see instructions |
| 6EA7..... Triode Unit 2 | A7 B8 C3 D1 G2 J8 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6EA8..... Triode Unit | A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6EA8..... Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6EB8..... Triode Unit | A4 B5 C1 D2 G3 J1 K4 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6EB8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6EH5..... | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6EH8..... Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I10 J2 K4 L1 L6 L7 M3 M10 N1 N9 | |
| 6EH8..... Triode Unit | A4 B5 C1 C6 D2 G3 I6 I10 J2 K8 L1 L6 L8 M3 M10 N1 N9 | |
| 6EM5..... | A4 B5 C7 D3 D6 E1 G9 I6 I8 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6ER5..... | A3 B4 C1 C6 C7 D2 G5 I6 I10 J2 K8 L1 L6 L8 M5 M10 N2 N9 | For gas test, see instructions |
| 6ES8 (ECC89) . | A4 B5 C3 C8 D2 D7 F1 G6 I6 I8 J1 K2 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6EU8..... Triode Unit | A4 B5 C6 D2 G3 I8 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| * 6EU8..... Pentode Unit | A4 B5 C8 D7 E9 G1 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6EV5..... | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6EW6..... | A3 B4 B7 C2 D1 E6 G5 I7 I9 J1 K7 L1 L6 L8 M5 M10 N2 N9 | For gas test, see instructions |
| 6EX6..... | A2 B7 C3 D5 E8 G10 I6 I7 J1 K2 L1 L6 L7 M3 M10 N1 N9 | |
| 6EY6..... | A2 B7 C8 D5 E4 G3 I6 I10 J7 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6F5, GT ..... | A7 B1 B2 C8 D10 G4 I6 I10 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6F6, G, GT.... | A2 B1 B7 C8 D5 E4 G3 I6 I10 J9 K5 M3 M10 N1 N9 | |
| 6F7..... Triode Unit | A1 B7 C6 D5 G4 I6 I10 J6 K10 L1 M5 M10 N2 N9 | Reject if below 2 |
| 6F7..... Pentode Unit | A1 B7 C6 D10 E3 G2 I7 I10 J6 K9 L1 M5 M10 N2 N9 | |
| 6F8G..... | A2 B7 C4 C8 D5 D10 F3 G6 I6 I10 J1 K1 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 6FH5..... | A3 B4 B6 C1 C7 D2 G5 I8 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6FM8..... Diode Unit | A4 B5 C1 C3 F2 G6 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6FM8..... Triode Unit | A4 B5 C7 D8 G9 J3 K9 L1 M5 M10 N2 N9 | For gas test, see instructions |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 6FV6..... | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6FW8..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I7 J1 K10 L1 L6 L9 M5 M10 N2 N9 | Test P1 and P2 |
| 6FY8..... Triode Unit | A4 B5 C8 D1 G9 J2 K5 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6FY8..... Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6G6 ..... | A2 B7 C8 D5 E4 G3 I6 I10 J6 K3 L1 M5 M10 N2 N9 | |
| 6GH8..... Triode Unit | A4 B5 C8 D9 G1 I8 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6GH8..... Pentode Unit | A4 B5 C7 D2 E3 G6 I8 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6H6 ..... | A2 B1 B7 C4 C8 F3 G5 K9 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6J4..... | A3 B4 C2 D1 G7 I7 I9 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6J5, GT..... | A2 B1 B7 C8 D5 G3 I6 I10 J3 K1 L1 M5 M10 N2 N9 | |
| 6J6..... | A3 B4 C7 D5 D6 F1 G2 I7 I9 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6J7, G, GT.... | A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J6 K8 L1 M5 M10 N2 N9 | |
| 6K5, GT ..... | A2 B1 B7 C8 D10 G3 I6 I10 J2 K5 K6 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6K6, GT ..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 M5 M10 N2 N9 | |
| 6K7, G/GT.... | A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J2 K6 L1 M5 M10 N2 N9 | |
| 6K8, G, GT.... Hexode Unit | A1 A2 B7 B10 C8 D5 G3 G4 I6 I7 J1 K5 L1 M5 M10 N2 N9 | |
| 6K8, G, GT.... Triode Unit | A7 B1 B2 C8 D5 G6 I6 I10 J1 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6L6 ..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6L7 ..... | A2 B1 B7 C8 D5 D10 E4 G3 I6 I10 J6 K6 L1 M5 M10 N2 N9 | |
| 6M3..... | A2 B8 C10 G3 I6 I10 K1 L4 L6 L10 M3 M10 N1 N9 | Reject if below 4 |
| 6N7, GT/G.... | A2 B1 B7 C8 D4 D5 F3 G6 I6 I10 J4 K8 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 6Q4 (EC80).... | A4 B5 C3 D1 G9 I7 I10 J1 K10 L1 L6 L9 M5 M10 N2 N9 | For gas test, see instructions |
| 6Q7, G, GT.... Diode Unit | A2 B1 B7 C8 F4 G5 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6Q7, G, GT.... Triode Unit | A2 B1 B7 C8 D10 G3 I6 I10 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6R7, GT ..... Triode Unit | A2 B7 C8 D10 G3 I6 I10 J7 K7 K8 L1 M5 M10 N2 N9 | |
| 6R7, GT ..... Diode Unit | A2 B7 C8 F4 G5 I6 I10 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2 |
| 6R8 ..... Triode Unit | A4 B5 C7 D8 G9 I6 I10 J3 K5 L1 M5 M10 N2 N9 | |
| 6R8 ..... Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 3 |
| 6S4, A..... | A4 B5 C2 D3 G9 I6 I10 J6 K1 L1 M5 M10 N2 N9 | |
| 6S7..... | A2 B7 C5 C8 D10 E4 G3 I6 I10 J6 K6 L1 M5 M10 N2 N9 | |
| 6S8GT..... Diode Unit | A7 B8 C2 C5 F4 G3 H1 K10 L3 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 3 |
| 6S8GT..... Triode Unit | A7 B8 C2 D10 G6 J2 K10 L1 M5 M10 N2 N9 | For gas test, see instructions |

| | | |
|---|---|---|
| 6SA7, GT ..... | A2 B1 B7 C6 C8 D5 G3 G4 I6 I10 J6 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6SB7Y..... | A2 B1 B7 C6 C8 D5 G3 G4 I6 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6SC7 ..... | A7 B1 B8 C6 D3 D4 F2 G5 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Test P1 and P2. For gas test, see instructions |
| 6SD7GT..... | A2 B1 B3 B7 C5 D4 E6 G8 I6 I10 J4 K6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6SF5, GT ..... | A7 B1 B8 C2 D3 G5 I7 I9 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6SF7 ..... Diode Unit | A7 B1 B8 C3 G5 K10 L3 M5 M10 N2 N9 | Reject if below 2 |
| 6SF7 ..... Pentode Unit | A7 B1 B8 C3 D2 E4 G6 I6 I10 J2 K4 L1 M5 M10 N2 N9 | |
| 6SG7 ..... | A2 B1 B7 C3 D4 E6 G8 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6SH7 ..... | A2 B1 B7 C3 D4 E6 G8 I6 I10 J2 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6SJ7, GT..... | A2 B1 B7 C3 C5 D4 E6 G8 I7 I10 J6 K7 L1 M5 M10 N2 N9 | Reject if below 4 |
| 6SK7, GT ..... | A2 B1 B7 C3 C5 D4 E6 G8 I6 I10 J4 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6SL7GT..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Test P1 and P2 |
| * 6SN7 ..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M5 M10 N2 N9 | Test P1 and P2 |
| * 6SN7GT, GTA, GTB..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 6SQ7, GT ..... Diode Unit | A7 B1 B8 C3 F4 G5 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2 |
| 6SQ7, GT ..... Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J2 K9 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6SR7 ..... Diode Unit | A7 B1 B8 C3 F4 G5 K8 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6SR7 ..... Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J7 K8 L1 M5 M10 N2 N9 | |
| 6SS7..... | A2 B1 B7 C3 C5 D4 E6 G8 I6 I10 J2 K4 L1 M5 M10 N2 N9 | |
| 6ST7 ..... Diode Unit | A7 B8 C3 F4 G5 K8 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6ST7 ..... Triode Unit | A7 B8 C3 D2 G6 I6 I10 J7 K8 L1 M5 M10 N2 N9 | |
| 6SU7, GTY.... | Use 6SL7GT Card. | |
| 6SV7 ..... Pentode Unit | A7 B8 C3 D2 E4 G6 I6 I10 J2 K3 L4 M5 M10 N2 N9 | |
| 6SV7 ..... Diode Unit | A7 B8 C3 G5 I6 I10 K7 L7 L6 L3 M5 M10 N2 N9 | Reject if below 4 |
| 6T4 ..... | A3 B4 C5 D2 G1 I8 I9 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6T7 ..... Diode Unit | A2 B7 C8 F4 G5 I6 I10 K6 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 6T7 ..... Triode Unit | A2 B7 C8 D10 G3 I6 I10 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6T8 ..... Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 3 |
| 6T8 ..... Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 6U4 ..... | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M3 M10 N1 N9 | Reject if below 3 |
| 6U5 ..... | A1 B6 C5 D3 E4 G2 I6 I10 J3 K10 L1 M5 M10 N2 N9 | Triode Test – P1. Shadow Min. – P1. Shadow Max. – P2. |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 6U7G..... | A7 B2 C5 C8 D10 E4 G3 I6 I10 J6 K10 L6 L7 L1 M5 M10 N2 N9 | |
| 6U8, A ..... Pentode Unit | A4 B5 C7 D2 E3 G6 I7 I10 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6U8, A ..... Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6V3A..... | A4 B5 C10 G2 K8 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4 |
| * 6V6..... | A2 B7 C8 D5 E4 G3 I6 I7 J1 K1 L1 M5 M10 N2 N9 | |
| * 6V6, GT ..... | A2 B7 C8 D5 E4 G3 I6 I7 J1 K1 L1 M5 M10 N2 N9 | |
| 6V8..... Triode Unit | A4 B5 C3 D6 G1 I7 I10 J1 K7 L1 M5 M10 N2 N9 | |
| 6V8..... Dual Diode | A4 B5 C3 C8 F2 G7 I6 I10 K1 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6V8..... Diode Unit | A5 B4 C3 G9 I6 I10 K2 L4 M5 M10 N2 N9 | Reject if below 2 |
| 6W4GT ..... | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M5 M10 N2 N9 | Reject if below 3 |
| 6W6, GT ..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M3 M10 N1 N9 | |
| 6W7..... | A2 B5 B7 C8 D10 E4 G3 I6 I10 J6 K7 L1 M5 M10 N2 N9 | |
| 6X4..... | A3 B4 C7 F1 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6X5, GT ..... | A7 B1 B2 C8 F3 G5 K5 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 6X8..... Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6X8..... Triode Unit | A4 B5 C6 D2 G3 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6Y6G..... | A2 B7 C8 D5 E4 G3 I6 I10 J10 K3 L1 L6 L7 M3 M10 N1 N9 | |
| 6Y7..... | A2 B7 C8 D4 D5 F3 G6 I6 I10 J2 K8 L1 M3 M10 N1 N9 | Test P1 and P2. For gas test, see instructions |
| 6Z7..... | A2 B7 C8 D4 D5 F3 G6 I6 I10 J2 K8 L1 M3 M10 N1 N9 | Test P1 and P2. For gas test, see instructions |
| 7A4..... | A1 B8 C7 D6 G2 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 7A5..... | A1 B8 C7 D6 E3 G2 I6 I10 J9 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 7A6..... | A1 B5 B8 C2 C7 F3 G6 I6 I10 K8 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 7A7..... | A1 B5 B8 C4 C7 D6 E3 G2 I6 I10 J2 K2 L1 M5 M10 N2 N9 | |
| 7A8..... | A1 B8 C7 D4 E3 G2 G5 G6 I6 I10 J1 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 7AD7..... | A1 B8 C4 C7 D6 E3 G2 I7 I10 J1 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 7AF7..... | A1 B8 C2 C7 D4 D5 F3 G6 I6 I10 J1 K1 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 7AG7..... | A1 B5 B8 C4 C7 D6 E3 G2 J1 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 7AH7..... | A1 B8 C4 C7 D6 E3 G2 I8 I10 J1 K1 L1 M3 M10 N1 N9 | For gas test, see instructions |
| 7AK7..... | A1 B5 B8 C4 C7 D6 E3 G2 J1 K8 L1 L6 L7 M3 M10 N1 N9 | |
| * 7AU7..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K9 L1 L6 L7 M2 M10 N2 N9 | Test P1 and P2 |
| 7B4..... | A1 B8 C7 D6 G2 I6 I10 J2 K8 L1 M5 M10 N2 N9 | For gas test, see instructions |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 7B5 ..... | A1 B8 C7 D6 E3 G2 I6 I10 J9 K6 L1 M5 M10 N2 N9 | |
| 7B6 ..... Diode Unit | A1 B8 C7 F5 G6 I6 I10 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2 |
| 7B6 ..... Triode Unit | A1 B8 C7 D3 G2 I6 I10 J2 K9 L1 M5 M10 N2 N9 | |
| 7B7 ..... | A1 B8 C4 C7 D6 E3 G2 I6 I10 J6 K5 L1 M5 M10 N2 N9 | |
| 7B8 ..... | A1 B8 C7 D4 G2 G3 G5 G6 I6 I10 J7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 7C5 ..... | A1 B8 C7 D6 E3 G2 I6 I10 J8 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 7C6 ..... Diode Unit | A1 B8 C4 C7 F5 G6 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 7C6 ..... Triode Unit | A1 B8 C4 C7 D3 G2 I6 I10 J1 K8 L1 M5 M10 N2 N9 | |
| 7C7 ..... | A1 B8 C4 C7 D6 E3 G2 I6 I10 J6 K7 L1 M5 M10 N2 N9 | |
| 7DJ8 ..... | A4 B5 C3 C8 D2 D7 F1 G6 I9 I10 J1 K1 L1 L6 L7 M4 M10 N2 N9 | Test P1 and P2 |
| 7E5 ..... | A2 B8 C4 D1 G3 I6 I10 J3 K3 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 7E6 ..... Diode Unit | A1 B8 C7 F6 G5 I6 I10 K10 L3 M3 M10 N1 N9 | Test P1 and P2. Reject if below 2 |
| 7E6 ..... Triode Unit | A1 B8 C7 D3 G2 I6 I10 J6 K10 L1 L6 L7 M3 M10 N1 N9 | |
| 7E7 ..... Diode Unit | A1 B8 C7 F4 G3 I6 I10 K10 L3 M3 M10 N1 N9 | Test P1 and P2. Reject if below 2 |
| 7E7 ..... Pentode Unit | A1 B8 C7 D6 E5 G2 I6 I10 J2 K6 L1 M3 M10 N1 N9 | |
| 7EY6..... | A2 B7 C8 D5 E4 G3 I6 I10 J7 K9 L1 L6 L8 M3 M10 N1 N9 | |
| 7F7 ..... | A1 B8 C2 C7 D4 D5 F3 G6 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Test P1 and P2. For gas test, see instructions |
| 7F8 ..... | A2 B7 C4 C5 D1 D8 F3 G6 J3 K5 L1 M5 M10 N2 N9 | Test P1 and P2. For gas test, see instructions |
| 7G7 ..... | A1 B8 C7 D6 E3 G2 I6 I10 J2 K3 L1 L6 L7 M3 M10 N1 N9 | |
| 7H7 ..... | A1 B5 B8 C4 C7 D6 E3 G2 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 7J7..... Triode Unit | A1 B8 C7 D4 G3 I6 I10 J3 K7 L1 M3 M10 N1 N9 | |
| 7J7..... Heptode Unit | A1 B8 C4 C7 D6 E5 G2 I6 I10 J3 K5 L1 M3 M10 N1 N9 | |
| 7K7 ..... Triode Unit | A1 B8 C2 D4 G3 I9 I10 J1 K8 L1 M5 M10 N2 N9 | |
| 7K7 ..... Diode Unit | A1 B8 C7 F5 G6 I6 I10 K3 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 7L7 ..... | A1 B4 B5 B8 C7 D6 E3 G2 I6 I10 J2 K7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 7N7 ..... | A1 B8 C2 C7 D4 D5 F3 G6 I6 I10 J3 K1 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 7Q7 ..... | A1 B5 B6 B8 C7 D4 G2 G3 I6 I10 J2 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 7R7 ..... Diode Unit | A1 B8 C7 F3 G4 I6 I10 K1 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 7R7 ..... Pentode Unit | A1 B8 C7 D6 E5 G2 I6 I10 J2 K1 L1 M5 M10 N2 N9 | |
| 7T7 ..... | A1 B8 C4 C7 D6 E3 G2 I6 I10 J2 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 7V7..... | A1 B5 B8 C4 C7 D6 E3 G2 I8 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |

| | | |
|---|---|---|
| 7W7 ..... | A1 B8 C4 C5 C7 D6 E3 G2 I8 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 7X6 ..... | A1 B8 C2 C7 F6 G3 I6 I10 K7 L4 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4. |
| 7X7 ..... Diode Unit | A1 B8 C4 C7 F6 G5 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2 |
| 7X7 ..... Triode Unit | A1 B8 C4 D3 G2 I6 I10 J2 K9 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 7Y4 ..... | A1 B8 C7 F3 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 7Z4 ..... | A1 B8 C7 F3 G6 K7 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4 |
| 8AU8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K8 L1 L6 L8 M5 M10 N3 N9 | |
| 8AU8..... Triode Unit | A4 B5 C1 D2 G3 I8 I9 J1 K6 L1 L6 L7 M5 M10 N3 N9 | |
| 8AW8A..... Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I7 J1 K2 L1 L6 L7 M5 M10 N3 N9 | |
| 8AW8A..... Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K10 L1 L6 L8 M5 M10 N3 N9 | For gas test, see instructions |
| 8BA8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I7 J1 K2 L1 L6 L7 M5 M10 N3 N9 | |
| 8BA8..... Triode Unit | A4 B5 C1 D2 G3 I6 I10 J7 K4 L1 M5 M10 N3 N9 | |
| 8BH8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K3 L1 L6 L7 M5 M10 N3 N9 | |
| 8BH8..... Triode Unit | A4 B5 C1 D2 G3 I6 I10 J7 K3 L1 M5 M10 N3 N9 | |
| 8BN8..... Diode Unit | A4 B5 C2 C3 F1 G6 I6 I10 K4 L3 L6 L7 M5 M10 N3 N9 | Test P1 and P2. Reject if below 3 |
| 8BN8..... Triode Unit | A4 B5 C9 D8 G7 I6 I10 J2 K7 L1 L6 L7 M5 M10 N3 N9 | For gas test, see instructions |
| 8BQ5..... | A4 B5 C3 D2 E9 G7 I6 I10 J6 K7 L1 L6 L8 M5 M10 N3 N9 | |
| 8BQ7..... | A4 B5 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M5 M10 N3 N9 | Test P1 and P2 |
| ★ 8CG7..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J3 K1 L1 M5 M10 N3 N9 | Test P1 and P2 |
| 8CM7..... Triode Unit 1 | A4 B5 C3 D7 G6 I6 I10 J6 K5 L1 M5 M10 N3 N9 | |
| 8CM7..... Triode Unit 2 | A4 B5 C9 D8 G1 I6 I10 J6 K7 L1 L6 L7 M5 M10 N3 N9 | |
| 8CN7..... Diode Unit | A4 B5 C3 F2 G1 K7 L3 L6 L8 M5 M10 N3 N9 | Test P1 and P2. Reject if below 3 |
| 8CN7..... Triode Unit | A4 B5 C6 D7 G8 I6 I10 J2 K7 L1 M5 M10 N3 N9 | For gas test, see instructions |
| 8CS7 ..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J6 K6 L1 M5 M10 N3 N9 | |
| 8CS7 ..... Triode Unit 2 | A4 B5 C9 D3 G1 I6 I10 J7 K1 L1 M5 M10 N3 N9 | |
| 8CX8..... Triode Unit | A4 B5 B6 B7 B8 B9 C1 D2 G3 I6 I7 J1 K6 K7 L1 L6 L7 M5 M10 N3 N9 | |
| 8CX8..... Pentode Unit | A4 B1 B2 B3 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M5 M10 N3 N9 | |
| 8CY7..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K7 L1 M5 M10 N3 N9 | For gas test, see instructions |
| 8CY7..... Triode Unit 2 | A4 B5 C9 D3 G1 J9 K6 L1 L6 L7 M5 M10 N3 N9 | For gas test, see instructions |
| 8EB8..... Triode Unit | A4 B5 C1 D2 G3 J1 K4 L1 M3 M10 N2 N9 | For gas test, see instructions |
| 8EB8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M3 M10 N2 N9 | |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 8EM5..... | A4 B5 C7 D3 D6 E1 G9 I6 I8 J1 K6 L1 L6 L7 M5 M10 N3 N9 | |
| * 8SN7..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M5 M10 N3 N9 | Test P1 and P2 |
| 8SN7GTB ..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M5 M10 N3 N9 | Test P1 and P2 |
| 9AK8..... Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M5 M10 N4 N9 | Test P1, P2 and P3. Reject if below 4 |
| 9AK8..... Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M5 M10 N4 N9 | For gas test, see instructions |
| 9AQ8..... | A4 B5 C3 C8 D2 D7 F1 F6 I6 I7 J1 K5 L1 L6 L7 M5 M10 N4 N9 | Test P1 and P2. For gas test, see instructions |
| * 9AU7..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K9 L1 L6 L7 M5 M10 N4 N9 | Test P1 and P2 |
| 9BR7..... Triode Unit | A4 B5 C3 D2 G1 J1 K7 L1 L6 L7 M5 M10 N4 N9 | For gas test, see instructions |
| 9BR7..... Diode Unit | A4 B5 C8 F6 G7 I6 I10 K7 L3 L6 L8 M5 M10 N4 N9 | Test P1 and P2. Reject if below 4 |
| 9BR8..... Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K9 L1 L6 L8 M5 M10 N4 N9 | |
| 9BR8..... Triode Unit | A4 B5 C3 D1 G2 I6 I9 J1 K2 L1 L6 L7 M5 M10 N4 N9 | |
| 9CL8..... Tetrode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N4 N9 | |
| 9CL8..... Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K1 L1 L6 L7 M5 M10 N4 N9 | |
| 9DZ8..... Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M4 M10 N3 N9 | |
| 9DZ8..... Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M4 M10 N3 N9 | |
| 9U8A..... Pentode Unit | A4 B5 C7 D2 E3 G6 I7 I10 J1 K6 L1 L6 L7 M5 M10 N4 N9 | |
| 9U8A..... Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K3 L1 L6 L7 M5 M10 N4 N9 | |
| 10C8..... Pentode Unit | A4 B5 C9 D8 E7 G6 I7 I9 J1 K2 L1 L6 L7 M4 M10 N5 N9 | |
| 10C8..... Triode Unit | A4 B5 C3 D2 G1 I6 I10 J3 K7 L1 L6 L7 M4 M10 N5 N9 | For gas test, see instructions |
| 10DE7..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M4 M10 N5 N9 | For gas test, see instructions |
| 10DE7..... Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K9 L1 L6 L8 M4 M10 N5 N9 | |
| 10EB8..... Triode Unit | A4 B5 C1 D2 G3 J1 K4 L1 M4 M10 N5 N9 | |
| 10EB8..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M4 M10 N5 N9 | |
| 11CY7..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K7 L1 M1 M10 N2 N9 | For gas test, see instructions |
| 11CY7..... Triode Unit 2 | A4 B5 C9 D3 G1 J9 K6 L1 L6 L7 M1 M10 N2 N9 | For gas test, see instructions |
| 12A4 ..... | A4 B5 C1 D7 G9 I6 I10 J4 K6 L1 L6 L8 M2 M10 N4 N9 | |
| 12A6, GT ..... | A2 B1 B7 C8 D5 E4 G3 I6 I10 J8 K3 L1 M2 M10 N3 N9 | |
| 12A8GT..... | A2 B1 B7 B10 C8 D5 G3 G4 G6 I6 I10 J7 K9 L1 L6 L7 M2 M10 N3 N9 | |
| 12AB5..... | A4 B5 C7 D3 D6 E1 G9 I6 I7 J1 K7 L1 L6 L7 M2 M10 N3 N9 | |
| 12AC6..... | A3 B2 B4 C7 D1 E6 G5 J1 K9 L2 M2 M10 N3 N9 | |
| 12AD6..... | A3 B4 C2 C7 D1 G5 G6 I6 I8 J1 K4 L2 M2 M10 N3 N9 | |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 12AD7..... | A4 B5 C3 C8 D2 D7 F6 G1 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. For gas test, see instructions |
| 12AE6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 12AE6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J1 K10 L2 M2 M10 N3 N9 | |
| 12AF3..... | A4 B5 C10 G9 I6 I10 K5 L4 L6 L10 M1 M10 N2 N9 | Reject if below 4 |
| 12AF6..... | A3 B2 B4 C7 D1 E6 G5 I6 I10 J1 K8 L2 M2 M10 N3 N9 | |
| 12AH7GT ..... | A7 B8 C2 C4 D1 D5 F3 G6 I6 I10 J6 K6 L1 M2 M10 N4 N9 | Test P1 and P2 |
| 12AJ6..... Diode Unit | A3 B4 C2 F5 G6 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 12AJ6..... Triode Unit | A3 B4 C2 D1 G7 I7 I9 J1 K9 L2 M2 M10 N3 N9 | For gas test, see instructions |
| 12AL5..... | A3 B4 C1 C5 F2 G7 I6 I10 K7 L3 L6 L8 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3 |
| 12AL8..... Tetrode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K2 L2 L6 L7 M2 M10 N3 N9 | For gas test, see instructions |
| 12AL8..... Triode Unit | A4 B5 C9 D8 G1 I6 I10 J5 K8 L1 M2 M10 N3 N9 | |
| 12AQ5..... | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M2 M10 N3 N9 | |
| 12AS5 ..... | A3 B4 C1 D2 E6 G7 I9 I10 J1 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12AT6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12AT6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M2 M10 N3 N9 | For gas test, see instructions |
| 12AT7..... | A4 B5 C3 C8 D2 D7 F1 G6 J1 K10 L1 L6 L8 M2 M10 N3 N9 | Test P1 and P2 |
| 12AU6..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12AU7..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 I5 K9 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2 |
| ★ 12AU7..... | Same Data as ECC82/12AU7. Correct 12AU7 data information. | |
| 12AV5GA ..... | A2 B4 B7 C3 D1 E8 G5 I7 I9 J10 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12AV6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12AV6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M2 M10 N3 N9 | For gas test, see instructions |
| 12AV7..... | A4 B5 C3 C8 D2 D7 F1 G6 I8 I10 J1 K4 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2 |
| 12AW6..... | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12AX4GT, GTA..... | A7 B8 C3 G5 I6 I10 K1 L4 L6 L9 M2 M10 N3 N9 | Reject if below 3 |
| 12AX5..... | A2 B7 C8 F3 G5 I6 I10 K6 L5 L6 L10 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12AX7..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. For gas test, see instructions |
| 12AY7..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J3 K10 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |
| 12AZ7..... | A4 B5 C3 C8 D2 D7 F1 G6 J1 K10 L1 L6 L8 M2 M10 N3 N9 | Test P1 and P2. For gas test, see instructions |
| 12B4A..... | A4 B5 C1 D2 D7 G9 I6 I10 K4 L1 L6 L7 M2 M10 N3 N9 | |
| 12BA6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K10 L1 L6 L8 M2 M10 N3 N9 | |

★ ***Indicates corrected punch data. Discard any punch information published previously on this tube-type.***

| | | |
|---|---|---|
| 12BA7..... | A4 B5 B6 B7 B8 C3 D2 G1 G9 I6 I10 J2 K1 L1 L6 L7 M2 M10 N3 N9 | |
| 12BD6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K3 L1 M2 M10 N3 N9 | |
| 12BE6..... | A3 B4 C2 C7 D1 G5 G6 I6 I10 J1 K3 L1 L6 L7 M2 M10 N3 N9 | |
| 12BF6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3 |
| 12BF6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J7 K8 L1 M2 M10 N3 N9 | |
| 12BH7, A ..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J7 K8 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2 |
| 12BK5..... | A4 B5 C6 D3 D7 E8 G1 I6 I10 J5 K3 L1 L6 L7 M2 M10 N3 N9 | |
| 12BL6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K7 L2 M2 M10 N3 N9 | |
| 12BN6..... | A3 B4 C1 D2 G5 G6 G7 J1 K8 L5 L6 L7 M2 M10 N4 N9 | |
| 12BQ6GTB, 12CU6..... | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12BR7..... Diode Unit | A4 B5 C8 F6 G7 K7 L3 L6 L8 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3 |
| 12BR7..... Triode Unit | A4 B5 C3 D2 G1 J1 K10 L1 L6 L8 M2 M10 N3 N9 | For gas test, see instructions |
| 12BV7..... | A4 B5 C1 C3 D2 E8 G7 I7 I10 J1 K6 L1 L6 L8 M2 M10 N3 N9 | |
| 12BW4..... | A4 B5 C9 F1 G7 I6 I10 K5 L5 L6 L10 M2 M10 N3 N9 | Test P1 and P2 |
| 12BY7, A ..... | A4 B5 C1 C3 D2 E8 G7 I7 I10 J1 K6 L1 L6 L8 M2 M10 N3 N9 | |
| 12BZ7..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K5 L1 M2 M10 N3 N9 | Test P1 and P2 |
| 12C5 ..... | A3 B4 C1 D2 E6 G7 I6 I10 J9 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12C8 ..... Diode Unit | A7 B1 B2 C8 F4 G5 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 12C8 ..... Pentode Unit | A7 B1 B2 C8 D10 E6 G3 I6 I10 J6 K8 L1 M2 M10 N3 N9 | |
| 12CA5..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J7 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12CM6..... | A4 B5 C7 D3 E1 G9 I6 I10 J8 K8 L1 L6 L7 M2 M10 N4 N9 | |
| 12CN5..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J1 K10 L2 L6 L8 M2 M10 N3 N9 | |
| 12CR6..... Diode Unit | A3 B4 C1 G2 I6 I10 K8 L3 M2 M10 N3 N9 | Reject if below 2 |
| 12CR6..... Pentode Unit | A3 B4 C1 D7 E6 G5 I6 I10 J3 K9 L1 L6 L7 M2 M10 N3 N9 | |
| 12CS6 ..... | A3 B4 B7 C2 D1 G5 G6 I6 I10 J7 K8 L1 L6 L7 M2 M10 N3 N9 | |
| 12CS7 ..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J6 K6 L1 M2 M10 N3 N9 | |
| 12CS7 ..... Triode Unit 2 | A4 B5 C9 D3 G1 I6 I10 J7 K1 L1 M2 M10 N3 N9 | |
| 12CT8..... Pentode Unit | A4 B5 C9 D8 E7 G6 I7 I10 J1 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12CT8..... Triode Unit | A4 B5 C3 D2 G1 I8 I9 J1 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12CU5..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12CU6, 12BQ6GTB.. | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12CX6..... | A3 B2 B4 C7 D1 E6 G5 I6 I10 J2 K1 L2 M2 M10 N3 N9 | For gas test, see instructions |
| 12CX6..... | A3 B4 C2 C7 D1 E6 G5 I8 I10 J1 K7 L2 L6 L7 M2 M10 N3 N9 | For gas test, see instructions |

| | | |
|---|---|---|
| 12D4..... | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M2 M10 N3 N9 | Reject if below 4 |
| 12DB5..... | A4 B5 C2 D3 E1 G9 I6 I7 J1 K8 L1 L6 L8 M2 M10 N3 N9 | |
| 12DE8..... Pentode Unit | A4 B5 C7 C9 D1 E8 G6 I9 I10 J1 K10 L2 L6 L7 M2 M10 N3 N9 | For gas test, see instructions |
| 12DE8..... Diode Unit | A4 B5 C2 G3 I6 I10 K9 L3 L6 L9 M2 M10 N3 N9 | Reject if below 4 |
| 12DK7..... Tetrode Unit | A4 B5 C2 D1 E3 G7 I6 I7 J1 K6 L2 L6 L7 M2 M10 N3 N9 | |
| 12DK7..... Diode Unit | A4 B5 C2 F9 G6 K8 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12DL8..... Diode Unit | A4 B5 C8 F1 G9 I6 I10 K7 L4 L6 L7 M10 M2 N3 N9 | Test P1 and P2. Reject if below 3 |
| 12DL8..... Tetrode Unit | A4 B5 C2 D7 E3 G6 I6 I10 J1 K5 L2 L6 L8 M2 M10 N3 N9 | |
| 12DM7..... | Use 12AX7 Card. | |
| 12DQ6A..... | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12DQ7..... | A5 B3 B4 C1 D2 E8 G7 I7 I10 J1 K10 L1 L6 L9 M2 M10 N4 N9 | |
| 12DS7..... Tetrode Unit | A4 B5 C8 D7 E3 G6 I6 I10 J2 K6 L2 L6 L8 M2 M10 N3 N9 | For gas test, see instructions |
| ★ 12DS7..... Diode Unit | A4 B5 C8 F1 G9 I6 I10 J3 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12DT5..... | A4 B5 C7 D3 E1 G9 I6 J9 K6 L6 L7 L1 M10 M2 M4 M9 | |
| 12DT7..... | Use 12AX7 Card. | |
| 12DT8..... | A4 B5 C3 C8 D2 D7 F1 G6 J1 K6 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2 |
| 12DV7..... Diode Unit | A4 B5 C1 F3 G2 K6 L4 M2 M10 N4 N9 | Test P1 and P2. Reject if below 3 |
| 12DV7..... Triode Unit | A4 B5 C8 D7 G6 J1 K9 K10 L2 M2 M10 N4 N9 | For gas test, see instructions |
| 12DV8..... Tetrode Unit | A4 B5 C2 C8 D7 E3 G6 I6 I9 J1 K8 K9 L2 L6 L8 M2 M10 N3 N9 | For gas test, see instructions |
| 12DV8..... Diode Unit | A4 B5 C2 C8 F1 G9 I6 I10 K9 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 12DW5..... | A4 B5 C7 D3 D6 E1 G9 I6 I10 J8 K1 L6 L7 M2 M10 N4 N9 | |
| 12DW8..... Triode Unit 1 | A4 B5 C8 D7 G6 I7 I10 J2 K3 L2 M2 M10 N3 N9 | For gas test, see instructions |
| 12DW8..... Triode Unit 2 | A4 B5 C3 D2 G1 I8 I10 J1 K6 L2 L6 L7 M2 M10 N3 N9 | For gas test, see instructions |
| 12DW8..... Diode Unit | A4 B5 C8 G9 I6 I10 K4 M2 M10 N3 N9 | Reject if below 4 |
| 12DY8..... Tetrode Unit | A4 B5 C2 D1 E3 G6 I6 I10 J2 K3 L2 L6 L7 M2 M10 N3 N9 | |
| 12DY8..... Triode Unit | A4 B5 C7 D9 G8 I6 I10 J1 K10 L2 L6 L7 M2 M10 N3 N9 | |
| 12DZ6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J3 K2 L2 M2 M10 N3 N9 | For gas test, see instructions |
| 12DZ6..... | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K8 L2 L6 L7 M2 M10 N3 N9 | |
| 12DZ8..... Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M2 M10 N3 N9 | |
| 12DZ8..... Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M2 M10 N3 N9 | |
| 12EA6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K7 L2 L6 L7 M2 M10 N4 N9 | For gas test, see instructions |
| 12ED5..... | A3 B4 C1 D5 E6 G7 I6 I10 J6 K7 L1 L6 L8 M2 M10 N3 N9 | |
| 12EG6..... | A3 B4 C1 C2 D7 E6 G5 I7 I10 J1 K9 L2 M2 M10 N3 N9 | Reject if below 3. For gas test, see instructions |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 12EH5..... | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M2 M10 N3 N9 | |
| 12EK6..... | A3 B4 C7 C2 D1 E6 G5 I6 I10 J1 K6 L6 L7 L2 M2 M10 N3 N9 | |
| 12EL6..... Diode Unit | A3 B4 C7 F5 G6 I6 I10 K1 L4 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 12EL6..... Triode Unit | A3 B4 C7 D1 G2 I6 I10 J1 K8 L2 M2 M10 N3 N9 | |
| 12EM6..... Tetrode Unit | A4 B5 C2 D1 E3 G6 I6 I8 J1 K10 L2 L6 L8 M2 M10 N3 N9 | |
| 12EM6..... Diode Unit | A4 B5 C2 G9 I6 I10 K2 L4 M2 M10 N3 N9 | Reject if below 2 |
| 12EN6..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K10 L1 L6 L9 M2 M10 N4 N9 | |
| 12EZ6..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J3 K8 L2 M2 M10 N3 N9 | |
| 12F5GT..... | A2 B7 C8 D10 G4 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Connect external lead to tube cap. |
| 12F8 ..... Diode Unit | A4 B5 C7 F1 G6 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12F8 ..... Pentode Unit | A4 B5 C7 C9 D8 E2 G3 I6 I10 J1 K8 L2 M2 M10 N3 N9 | |
| 12FK6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12FK6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J1 K7 L2 M2 M10 N3 N9 | |
| 12FK6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K1 L4 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12FK6..... Triode Unit | A3 B4 C2 D1 G7 J1 K8 L2 M2 M10 N3 N9 | For gas test, see instructions |
| 12FM6..... Diode Unit | A3 B4 C2 F5 G6 K8 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12FM6..... Triode Unit | A3 B4 C2 D1 G7 J2 K8 K9 L2 M2 M10 N3 N9 | For gas test, see instructions |
| 12H6 ..... | A2 B7 C4 C8 F3 G5 K9 L3 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3 |
| 12J5GT ..... | A2 B1 B7 C8 D5 G3 I6 I10 J3 K1 L1 M2 M10 N3 N9 | |
| 12J7GT ..... | A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J6 K8 L1 M2 M10 N3 N9 | |
| 12J8..... Diode Unit | A4 B5 C7 F8 G9 K10 L3 L6 L9 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3 |
| 12J8..... Tetrode Unit | A4 B5 C2 D1 E3 G6 I6 I10 J1 K4 L2 L6 L7 M2 M10 N3 N9 | |
| 12K5 ..... | A3 B4 C1 D2 E5 E6 G7 I6 I10 J4 K6 L2 L6 L7 M2 M10 N3 N9 | |
| 12K7GT..... | A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J2 K6 L1 M2 M10 N3 N9 | |
| 12K8 ..... Triode Unit | A2 B1 B7 C8 D5 G6 I6 I10 J1 K8 L1 L6 L7 M2 M10 N3 N9 | |
| 12K8 ..... Hexode Unit | A2 B1 B7 B10 C8 D5 G3 G4 I6 I7 J1 K5 L1 M2 M10 N3 N9 | |
| 12L6GT..... | A7 B1 B2 C8 D5 E4 G3 I6 I10 J9 K7 L1 L6 L8 M2 M10 N3 N9 | |
| 12Q7GT..... Diode Unit | A7 B1 B2 C8 F4 G5 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 12Q7GT..... Triode Unit | A7 B1 B2 C8 D10 G3 I6 I10 J2 K8 L1 M2 M10 N3 N9 | For gas test, see instructions |
| 12R5 ..... | A3 B4 C1 D2 D5 E6 G7 I6 I9 J9 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12S8GT..... Diode Unit 2-3 | A8 B7 C2 F1 G4 I6 I10 K2 L4 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 12S8GT..... Diode Unit 1 | A8 B7 C5 G3 I6 I10 K1 L4 M2 M10 N3 N9 | Reject if below 3 |
| 12S8GT..... Triode Unit | A7 B8 C2 D10 G6 I6 I10 J2 K9 L1 M2 M10 N3 N9 | |

| | | |
|---|---|---|
| 12SA7, GT .... | A2 B1 B7 C6 C8 D5 G3 G4 I6 I10 J6 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12SC7 ..... | A7 B1 B8 C6 D3 D4 F2 G5 I6 I10 J2 K9 L1 M2 M10 N3 N9 | Test P1 and P2. For gas test, see instructions |
| 12SF5GT..... | A7 B1 B8 C2 D3 G5 I7 I9 J2 K8 L1 M2 M10 N3 N9 | For gas test, see instructions |
| 12SF7 ..... Diode Unit | A7 B1 B8 C3 G5 K10 L3 M2 M10 N3 N9 | Reject if below 2 |
| 12SF7 ..... Pentode Unit | A7 B1 B8 C3 D2 E4 G6 I6 I10 J2 K4 L1 M2 M10 N3 N9 | |
| 12SG7 ..... | A7 B1 B2 C3 D4 E6 G8 I6 I10 J2 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12SH7 ..... | A7 B1 B2 C3 C3 D4 E6 G8 I6 I10 J2 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12SJ7, GT..... | A7 B1 B2 C3 C5 D4 E6 G8 I7 I10 J6 K7 L1 M2 M10 N3 N9 | |
| 12SK7, GT .... | A7 B1 B2 C3 C5 D4 E6 G8 I6 I10 J4 K9 L1 L6 L7 M2 M10 N3 N9 | |
| 12SL7, GT .... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. |
| * 12SN7 ..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M2 M10 N3 N9 | Test P1 and P2 |
| 12SN7GT..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M2 M10 N3 N9 | Test P1 and P2 |
| 12SQ7 ..... Diode Unit | A7 B1 B8 C3 F4 G5 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 12SQ7 ..... Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J2 K9 L1 M2 M10 N3 N9 | For gas test, see instructions |
| 12SR7 ..... Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J7 K8 L1 M2 M10 N3 N9 | |
| 12SR7 ..... Diode Unit | A7 B1 B8 C3 F4 G5 K8 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3 |
| 12SW7 ..... Diode Unit | A7 B1 B8 C3 F4 G5 K8 L3 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12SW7 ..... Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J7 K7 L1 M2 M10 N3 N9 | |
| 12SX7GT..... | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M2 M10 N3 N9 | Test P1 and P2 |
| 12SY7 ..... | A2 B1 B7 C6 C8 D5 G3 G4 I6 I10 J6 K7 L1 L6 L7 M2 M10 N3 N9 | |
| 12U7 ..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J1 K7 K8 L2 M2 M10 N3 N9 | Test P1 and P2. For gas test, see instructions |
| 12V6GT..... | A7 B2 C8 D5 E4 G3 I6 I7 J1 K1 L1 L6 L7 M2 M10 N3 N9 | |
| 12W6GT..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M2 M10 N3 N9 | |
| 12X4 ..... | A3 B4 C7 F1 G6 K6 L5 L6 L10 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4 |
| 12Z3 ..... | A1 B4 C3 G2 I6 I10 K6 L4 L6 L10 M2 M10 N3 N9 | Reject if below 3 |
| 13DE7..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M1 M10 N3 N9 | |
| 13DE7..... Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K9 L1 L6 L8 M1 M10 N3 N9 | |
| 13DR7..... Triode Unit 1 | A4 B5 C8 D7 G6 J1 K6 L1 M2 M10 N3 N9 | For gas test, see instructions |
| 13DR7..... Triode Unit 2 | A4 B5 C9 D2 G1 J7 K6 L1 L6 L7 M2 M10 N4 N9 | |
| 14A5 ..... | A1 B8 C7 D6 E3 G2 I8 I10 J1 K1 L1 M2 M10 N5 N9 | |
| 14A7..... | A1 B5 B8 C4 C7 D6 E3 G2 I6 I10 J2 K2 L1 M2 M10 N3 N9 | |
| 14AF7..... | A8 B1 C2 C7 D4 D5 F3 G6 I6 I10 J1 K1 L1 M2 M10 N3 N9 | Test P1 and P2 |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 14B6 ..... Diode Unit | A8 B1 C4 C7 F5 G6 I6 I10 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2 |
| 14B6 ..... Triode Unit | A8 B1 C4 C7 D3 G2 I6 I10 J2 K9 L1 M2 M10 N3 N9 | For gas test, see instructions |
| 14B8 ..... | A1 B8 C7 D4 G2 G3 G5 G6 I6 I10 J7 K8 L1 L6 L7 M2 M10 N5 N9 | |
| 14C5 ..... | A1 B8 C7 D6 E3 G2 I6 I10 J8 K8 L1 L6 L7 M2 M10 N5 N9 | |
| 14C7 ..... | A8 B1 B5 C4 C7 D6 E3 G2 I6 I10 J6 K7 L1 M2 M10 N3 N9 | |
| 14E6 ..... Diode Unit | A1 B8 C7 F6 G5 I6 I10 K10 L3 M2 M10 N5 N9 | Test P1 and P2. Reject if below 2 |
| 14E6 ..... Triode Unit | A1 B8 C7 D3 G2 I6 I10 J6 K10 L1 L6 L7 M2 M10 N5 N9 | |
| 14E7 ..... Diode Unit | A1 B8 C7 F4 G3 I6 I10 K10 L3 M2 M10 N5 N9 | Test P1 and P2. Reject if below 2 |
| 14E7 ..... Pentode Unit | A1 B8 C7 D6 E5 G2 I6 I10 J2 K6 L1 M2 M10 N5 N9 | |
| 14F7 ..... | A8 B1 C2 C7 D4 D5 F3 G6 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. For gas test, see instructions |
| 14F8 ..... | A2 B7 C4 C5 D1 D8 F3 G6 J3 K5 L1 M2 M10 N3 N9 | Test P1 and P2. For gas test, see instructions |
| 14H7 ..... | A1 B5 B8 C4 C7 D6 E3 G2 I6 I10 J2 K5 L1 L6 L7 M2 M10 N5 N9 | |
| 14J7..... Triode Unit | A1 B8 C7 D4 G3 I6 I10 J3 K7 L1 M2 M10 N5 N9 | |
| 14J7..... Heptode Unit | A1 B8 C4 C7 D6 E5 G2 I6 I10 J3 K5 L1 M2 M10 N5 N9 | |
| 14K7 ..... Diode Unit | A1 B8 C7 F5 G6 I6 I10 K3 L4 M2 M10 N5 N9 | Test P1 and P2. Reject if below 3 |
| 14K7 ..... Triode Unit | A1 B8 C2 D4 G3 I9 I10 J1 K8 L1 M2 M10 N5 N9 | |
| 14N7 ..... | A1 B8 C2 C7 D4 D5 F3 G6 I6 I10 J3 K1 L1 M2 M10 N5 N9 | Test P1 and P2 |
| 14Q7 ..... | A8 B1 B5 B6 C7 D4 G2 G3 I6 I10 J2 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 14R7 ..... Diode Unit | A8 B1 C7 F3 G4 I6 I10 K1 L1 L4 M2 M10 N8 N9 | Test P1 and P2. Reject if below 1 |
| 14R7 ..... Pentode Unit | A8 B1 C7 D6 E5 G2 I6 I10 J2 K1 L1 M2 M10 N3 N9 | |
| 14S7..... Triode Unit | A1 B8 C7 D4 G3 I6 I10 J3 K7 L1 M2 M10 N5 N9 | |
| 14S7..... Heptode Unit | A1 B8 C4 C7 D6 E5 G2 I6 I10 J3 K1 L1 M2 M10 N5 N9 | |
| 14W7 ..... | A1 B8 C4 C5 C7 D6 E3 G2 I8 I10 J1 K6 L1 L6 L7 M2 M10 N5 N9 | |
| 14X7 ..... Diode Unit | A1 B8 C4 C7 F6 G5 I6 I10 K7 L3 L6 L8 M2 M10 N5 N9 | Test P1 and P2. Reject if below 2 |
| 14X7 ..... Triode Unit | A1 B8 C4 D3 G2 I6 I10 J2 K9 L1 M2 M10 N5 N9 | For gas test, see instructions |
| 14Y4 ..... | A1 B8 C7 F3 G6 K6 L5 L6 L10 M2 M10 N5 N9 | Test P1 and P2. Reject if below 4 |
| 17AV5GA ..... | A2 B7 C3 D1 E8 G5 I7 I9 J10 K6 L1 L6 L7 M4 M9 N2 N8 | |
| 17AX4GT ..... | A7 B8 C3 G5 I6 I10 K1 L4 L6 L9 M4 M9 N2 N8 | Reject if below 4 |
| 17BQ6GTB.... | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M4 M9 N2 N8 | |
| 17C5 ..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K2 L1 L6 L7 M4 M9 N2 N8 | |
| 17D4 ..... | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M4 M9 N2 N8 | Reject if below 4 |
| 17DE4..... | A7 B8 C3 G5 I6 I10 K7 L4 L6 L10 M3 M9 N2 N8 | Reject if below 4 |

| | | |
|---|---|---|
| 17DQ6A..... | A2 B7 C8 D5 E4 G10 I7 I9 J10 K5 L1 L6 L7 M3 M9 N2 N8 | |
| 17H3 ..... | A4 B5 C1 G3 G8 I7 I10 K8 L4 L6 L10 M4 M9 N2 N8 | Reject if below 4 |
| 17L6GT..... | A2 B7 C8 D5 E4 G3 I6 I10 J8 K10 L1 L6 L9 M4 M9 N2 N8 | |
| 18A5 ..... | A2 B7 C3 D1 E8 G5 I8 I10 J10 K10 L1 L6 L8 M5 M9 N3 N8 | |
| 18DZ8..... Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M5 M9 N3 N8 | |
| 18DZ8..... Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M5 M9 N3 N8 | |
| 18FW6..... | A3 B4 C2 C7 D1 E6 G5 I7 I10 K7 L1 L6 L7 M3 M9 N2 N8 | |
| 18FX6..... | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K7 L1 L6 L7 M3 M9 N2 N8 | |
| 18FY6..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K3 L4 M3 M9 N2 N8 | Test P1 and P2. Reject if below 4 |
| 18FY6..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K10 L1 L6 L7 M3 N2 N8 N9 | For gas test, see instructions |
| 19AQ5..... | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M4 M9 N3 N8 | |
| 19AU4..... | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M5 M9 N3 N8 | Reject if below 4 |
| 19BG6G, GA... | A7 B2 C3 D5 E8 G10 I6 I10 J9 K10 L1 L6 L8 M5 M9 N3 N8 | |
| 19C8 ..... Diode Unit | A4 B5 C3 C7 F2 G1 H6 I6 I10 K7 L3 L6 L8 M4 M9 N3 N8 | Test P1, P2 and P3. Reject if below 3 |
| 19C8 ..... Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M4 M9 N3 N8 | For gas test, see instructions |
| 19DE7..... Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M5 M9 N4 N8 | |
| 19DE7..... Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K9 L1 L6 L8 M5 M9 N4 N8 | |
| 19J6..... | A3 B4 C7 D5 D6 F1 G2 I7 I9 J1 K5 L1 L6 L7 M5 M9 N3 N8 | Test P1 and P2 |
| 19T8 ..... Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M5 M9 N3 N8 | Test P1, P2 and P3. Reject if below 3 |
| 19T8 ..... Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M5 M9 N3 N8 | For gas test, see instructions |
| 19V8 ..... Dual Diode | A4 B5 C3 C8 F2 G7 I6 I10 K1 L3 L6 L7 M4 M9 N3 N8 | Test P1 and P2. Reject if below 4 |
| 19V8 ..... Diode Unit | A5 B4 C3 G9 I6 I10 K2 L4 M4 M9 N3 N8 | Reject if below 2 |
| 19V8 ..... Triode Unit | A4 B5 C3 D6 G1 I7 I10 J1 K7 L1 M4 M9 N3 N8 | |
| 19X8 ..... Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I8 J1 K6 L1 L6 L7 M5 M9 N3 N8 | |
| 19X8 ..... Triode Unit | A4 B5 C6 D2 G3 I7 I9 J1 K4 L1 L6 L7 M5 M9 N3 N8 | |
| 21EX6..... | A2 B7 C3 D5 E8 G10 I6 I7 J1 K2 L1 L6 L7 M2 M9 N3 N8 | |
| 22DE4..... | A7 B8 C3 G5 I6 I10 K7 L4 L6 L10 M2 M9 N3 N8 | Reject if below 4. |
| 24A ..... | A1 B5 C4 D10 E3 G2 I6 I10 J4 K9 L1 M2 M6 N4 N6 | |
| 25A6 ..... | A2 B7 C8 D5 E4 G3 J10 K6 L1 M5 M10 N1 N8 | |
| 25A7 ..... Diode Unit | A2 B7 C1 G6 I6 I10 K7 L4 L6 L10 M5 M10 N1 N8 | Reject if below 4. |
| 25A7 ..... Pentode Unit | A2 B7 C8 D5 E4 G3 J4 K6 L1 L6 L7 M5 M10 N1 N8 | |
| 25AC5..... | A2 B7 C8 D5 G3 I7 I9 J1 K9 L1 M5 M10 N1 N8 | |
| 25AV5GT, GTA | A6 A7 B2 C3 C4 D1 E8 G5 I7 I9 J10 K6 L1 L6 L7 M1 M9 N5 N8 | |

| | | |
|---|---|---|
| 25AX4GT ..... | A7 B8 C3 G5 I6 I10 K8 L4 L6 L10 M1 M9 N5 N8 | Reject if below 4 |
| 25B6 ..... | A2 B7 C8 D5 E4 G3 I9 I10 J1 K6 L1 L6 L7 M5 M10 N1 N8 | |
| 25BK5..... | A4 B5 C6 D3 E8 G1 I6 I10 J5 K2 K3 L1 L6 L7 M5 M10 N1 N8 | |
| 25BQ6GT. GBT/25CU6. | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M1 M9 N5 N8 | |
| 25C5 ..... | A3 B4 C1 D2 E6 G7 I6 I10 J9 K2 L1 L6 L7 M5 M10 N1 N8 | |
| 25CA5..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J7 K1 L1 L6 L7 M1 M9 N5 N8 | |
| 25CU6/ 25BQ6GT GTB..... | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M1 M9 N5 N8 | |
| 25D4 ..... | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M1 M9 N5 N8 | Reject if below 4 |
| 25DN6..... | A2 B7 C3 D5 E8 G10 I8 I10 J10 K4 L1 L6 L7 M1 M9 N5 N8 | |
| 25DQ6..... | A2 B7 C8 D5 E4 G10 I7 I10 J10 K5 L1 L6 L7 M1 M9 N5 N8 | |
| 25DT5..... | A4 B5 C7 D3 E1 G9 I6 I10 J9 K6 L1 L6 L7 M1 M9 N5 N8 | |
| 25EC6..... | A2 B7 C3 D5 E8 G10 I6 I9 J10 K7 K8 L1 L6 L8 M1 M9 N5 N8 | |
| 25EH5..... | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M1 M9 N5 N8 | |
| 25F5 ..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K4 L1 L6 L7 M1 M9 N5 N8 | |
| 25GD6, GA, GB | A2 B7 C3 D5 E8 G10 I6 I7 J10 K5 L1 L6 L7 M1 M9 N5 N8 | |
| 25L6, GT..... | A2 B1 B7 C8 D5 E4 G3 I6 I10 J9 K7 L1 L6 L8 M1 M9 N5 N8 | |
| 25U4 ..... | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M5 M10 N1 N8 | Reject if below 3 |
| 25W4GT..... | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M1 M9 N5 N8 | Reject if below 4 |
| 25W6GT..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M1 M9 N5 N8 | |
| 25Y5 ..... | A1 B6 C3 C4 F2 G5 I6 I10 K6 L4 L6 L9 M5 M10 N1 N8 | Test P1 and P2. Reject if below 4 |
| 25Z5 ..... | A1 B6 C3 C4 F2 G5 I6 I10 K7 L4 L6 L10 M1 M9 N5 N8 | Test P1 and P2. Reject if below 4 |
| 25Z6, GT/G... | A2 B7 C4 C8 F3 G5 I6 I10 K7 L4 L6 L10 M1 M9 N5 N8 | Test P1 and P2. Reject if below 4 |
| 26A6 ..... | A3 B4 C2 C7 D1 E6 G5 I8 I10 J1 K6 L1 L6 L7 M1 M9 N5 N8 | |
| 26A7GT..... | A6 B7 C2 D1 D3 E5 F8 G4 I6 I10 J5 K1 L2 M3 M10 N1 N8 | Test P1 and P2 |
| 26C6 ..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K10 L3 M4 M10 N2 N8 | Test P1 and P2. Reject if below 2 |
| 26C6 ..... Triode Unit | A3 B4 C2 D1 G7 I8 I10 J6 K7 L1 M4 M10 N2 N8 | |
| 26D6 ..... | A3 B4 C2 D1 G5 G6 G7 I6 I10 J6 K7 L1 L6 L7 M4 M10 N2 N8 | |
| 26Z5W..... | A4 B5 C3 C8 F1 G6 I6 I10 K8 L4 L6 L10 M4 M10 N1 N8 | Test P1 and P2. Reject if below 2 |
| 27..... | A1 B5 C4 D3 G2 I6 I9 J8 K9 L1 M4 M6 N2 N6 | |
| 28D7, W..... | A1 B8 C6 D2 D7 E3 F4 G5 I6 I10 J3 K2 L2 M3 M10 N1 N8 | Test P1 and P2. Reject if below 4 |
| 32ET5..... | A3 B4 C1 D2 E6 G7 I6 I10 J9 L1 L6 L7 M2 M10 N3 N8 | |
| 35A5 ..... | A1 B8 C7 D6 E3 G2 I6 I10 J9 K3 L1 L6 L7 M1 M10 N5 N8 | |
| 35B5 ..... | A3 B4 C2 D1 E6 G5 I6 I10 J9 K4 L1 L6 L7 M1 M10 N5 N8 | |

| | | |
|---|---|---|
| 35C5 ..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K4 L1 L6 L7 M1 M10 N5 N8 | |
| 35CD6..... | A2 B7 C3 D5 E8 G10 I6 I7 J10 K5 L1 L6 L7 M5 N1 N7 N8 | |
| 35DZ8..... Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M1 M10 N5 N8 | |
| 35DZ8..... Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M1 M10 N5 N8 | |
| 35L6GT..... | A7 B2 C8 D5 E4 G3 I6 I10 J9 K4 L1 L6 L7 M1 M10 N5 N8 | |
| 35W4 ..... | A3 B4 C7 G5 I6 I10 K5 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4 |
| 35Y4 ..... | A1 B8 C7 G2 I6 I10 K3 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4 |
| 35Z3 ..... | A1 B8 C7 G2 I6 I10 K4 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4 |
| 35Z4GT..... | A2 B7 C8 G5 I6 I10 K3 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4 |
| 35Z5GT..... | A2 B7 C8 G5 I6 I10 K5 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4 |
| 36AM3..... | A3 B4 C7 G5 I6 I10 K5 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4 |
| 41..... | A1 B6 C5 D4 E3 G2 I6 I10 J9 K5 L1 M5 M10 N2 N9 | |
| 42..... | A1 B6 C5 D4 E3 G2 I6 I10 J9 K5 L1 M3 M10 N1 N9 | |
| 45..... | A4 B1 D3 G2 J10 K7 L1 M2 M6 N4 N6 | |
| 45Z3 ..... | A1 B7 C4 G2 I6 I10 K8 L4 L6 L10 M1 M7 N5 N7 | Reject if below 4 |
| 45Z5 ..... | A2 B7 C8 G5 I6 I10 K5 L4 L6 L10 M5 M7 N1 N6 | Reject if below 4 |
| 50A5 ..... | A1 B8 C7 D6 E3 G2 I6 I10 J9 K1 L1 L6 L7 M5 M7 N5 N6 | |
| 50B5 ..... | A3 B4 C2 D1 E6 G5 I6 I10 J9 K2 L1 L6 L7 M5 M7 M5 N6 | |
| 50BK5..... | A4 B5 C6 D3 E8 G1 I6 I10 J5 K3 L1 L6 L7 M5 M7 N5 N6 | |
| 50C5 ..... | A3 B4 C1 D2 E6 G7 I6 I10 J9 K2 L1 L6 L7 M5 M7 N5 N6 | |
| 50CA5..... | A3 B4 C1 D2 D5 E6 G7 I6 I10 J5 K1 L1 L6 L7 M5 M7 N5 N6 | |
| 50CD6 ..... | A2 B7 C3 D5 E8 G10 I6 I7 J10 K5 L1 L6 L7 M4 M7 N5 N6 | |
| 50DC4..... | A3 B4 C7 G5 I6 I10 K6 L4 L6 L10 M5 M7 N5 N6 | Reject if below 4 |
| 50EH5..... | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M5 M7 N5 N6 | |
| 50FY8..... Triode Unit | A4 B5 C8 D1 G9 J2 K5 L1 M5 M7 N5 N6 | For gas test, see instructions |
| 50FY8..... Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I10 J1 L1 L6 L7 M5 M7 N5 N6 | |
| 50L6GT..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K7 L1 L6 L8 M5 M7 N5 N6 | |
| 50X6 ..... | A1 B8 C2 C7 F3 G6 I6 I10 K7 L4 L6 L10 M5 M7 N5 N6 | Test P1 and P2. Reject if below 4 |
| 50Y6GT..... | A2 B7 C4 C8 F3 G5 I6 I10 K7 L4 L6 L10 M5 M7 N5 N6 | Test P1 and P2. Reject if below 4 |
| 50Y7GT..... | A2 B7 C4 C8 F3 G5 I6 I10 K7 L4 L6 L10 M5 M7 N5 N6 | Test P1 and P2. Reject if below 4. |
| 53..... | A1 B7 C4 D3 D5 F2 G6 I6 I10 J4 K7 L1 M4 M6 N2 N6 | Test P1 and P2 |
| 70L7 ..... Diode Unit | A2 B7 C1 G8 I6 I10 K6 L1 L4 L6 L10 M5 M10 N5 N7 | Reject if below 4 |
| 70L7..... Pentode Unit | A2 B7 C6 D5 E4 G3 I6 I7 J1 K4 L1 L6 L7 M5 M10 N5 N7 | |

| | | |
|---|---|---|
| 75..... Diode Unit | A1 B6 C5 F3 G4 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2 |
| 75..... Triode Unit | A1 B6 C5 D10 G2 I6 I10 J2 K9 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 76..... | A1 B5 C4 D3 G2 I6 I10 J8 K8 L1 M5 M10 N2 N9 | |
| 78..... | A1 B6 C4 C5 D10 E3 G2 I6 I10 J2 K7 L1 M5 M10 N2 N9 | |
| 80..... | A4 B1 F2 G3 K5 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4 |
| 84/6Z4..... | A1 B5 C4 F2 G3 K7 L4 L6 L9 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 85..... Triode Unit | A1 B6 C5 D10 G2 I6 I10 J9 K9 L1 M5 M10 N2 N9 | |
| 85..... Diode Unit | A1 B6 C5 F3 G4 I6 I10 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2 |
| 117L7/M7GT .. Diode Unit | A2 B7 C1 G6 I6 I10 K4 L4 L6 L10 M4 M10 N2 N6 | Reject if below 4 |
| 117L7/M7GT .. Pentode Unit | A2 B7 C8 D4 E5 G3 I6 I10 J8 K9 L1 L6 L8 M4 M10 N2 N6 | |
| 117N7GT..... Pentode Unit | A7 B2 C6 D4 E5 E8 G3 J8 K4 L6 L9 M4 M10 N2 N6 | Reject if below 4 |
| 117N7GT..... Diode Unit | A2 B7 G8 K4 L4 L6 L10 M4 M10 N2 N6 | Reject if below 4 |
| 117P7 ..... Diode Unit | A2 B7 G8 K4 L4 L6 L10 M4 M10 N2 N6 | Reject if below 4 |
| 117P7 ..... Pentode Unit | A2 B7 C6 D4 E5 G3 I6 I10 J8 K9 L1 L6 L8 M4 M10 N2 N6 | |
| 117Z3 ..... | A3 B4 C6 G5 I6 I10 K7 L4 L6 L10 M4 M10 N2 N6 | Reject if below 4 |
| 117Z6GT..... | A2 B7 C4 C8 F3 G5 I6 I10 K6 L4 L6 L10 M4 M10 N2 N6 | Test P1 and P2. Reject if below 4 |
| 404A ..... | See 5847 Card. | |
| 417A ..... | See 5842 Card. | |
| 418A ..... | A1 B6 C4 D8 E5 G2 I6 I10 J3 K6 L1 L6 L9 M5 M10 N2 N9 | For gas test, see instructions |
| 807..... | A1 B5 C4 D3 E2 G10 I6 I10 J9 K6 L1 L6 L7 M3 M10 N1 N9 | |
| 837..... | A1 B2 B5 B7 C6 D4 E3 G10 I6 I10 J8 K7 L1 L6 L7 M2 M10 N3 N9 | |
| 1612..... | Use 6L7 Card. | |
| 1614..... | Use 6L6G card. | |
| 1620..... | Use 6J7 Card. | |
| 1621..... | Use 6F6 Card. | |
| 1622..... | Use 6L6 Card. | |
| 1634..... | Use 12SC7 Card. | |
| 1635..... | A2 B7 C8 D4 D5 F3 G6 I6 I10 J1 K8 K9 L1 M5 M10 N2 N9 | Test P1 and P2 |
| 1644..... | Use 12L8 Cards. | |
| 1853..... | See 6AB7/1853. | |
| 5559..... | No test. | |
| 5591..... | Use 6AK5 Card. | |
| 5608A ..... | A1 B7 C4 D3 D5 F2 G6 J1 K4 L1 M4 M6 N2 N6 | Test P1 and P2. |
| * 5618..... | A7 B1 C4 D6 E3 G2 I6 I10 J9 K6 L1 L6 L8 M4 M10 N2 N9 | |
| 5639..... | A3 B6 C2 D1 E7 G5 I7 I9 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 5642..... | A1 B2 G10 K8 K9 L4 M2 M6 N1 N6 | Reject if below 3 |
| 5651..... | A8 G1 K1 L1 M5 M10 N5 N9 | Use WG-324A Adaptor |
| 5654..... | Use 6AK5 Card. | |

★ *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| | | |
|---|---|---|
| 5670..... | A1 B5 B9 C2 C8 D3 D7 F4 G6 J1 K5 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 5672..... | A3 B5 D4 E2 G1 J10 K9 K10 L5 M2 M6 N1 N6 | |
| 5676..... | A2 B4 D3 G1 J7 K3 L1 M2 M6 N1 N6 | |
| 5678..... | A5 B3 D4 E2 G1 J6 K9 L5 M2 M6 N1 N6 | Reject if below 3 |
| 5679..... | Use 7A6 Card. | |
| 5686..... | A4 B5 C1 C3 D2 E6 G7 I6 I10 J8 K3 K4 L1 M5 M10 N2 N9 | |
| 5687..... | A4 A5 B8 C3 C6 D2 D7 F1 G9 I6 I10 J4 K6 L1 L6 L8 M3 M10 N1 N9 | Test P1 and P2 |
| 5691..... | Use 6SL7 Card. | |
| 5692..... | Use 6SN7 Card. | |
| 5693..... | Use 6SJ7 Card. | |
| 5696..... | No test – Gas tube. | |
| 5702..... | A3 B4 C5 C6 D7 E2 G1 I7 I8 J1 K5 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 5703..... | A3 B4 C6 D5 G1 I9 I10 J1 K5 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 5718..... | A3 B6 C2 C4 C5 C7 D1 G8 I6 I7 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 5725..... | Use 6AS6 Card. | |
| 5726..... | Use 6AL5 Card. | |
| 5732..... | Use 6K7 Card. | |
| 5749..... | Use 6BA6 Card. | |
| 5750..... | Use 6BE6 Card. | |
| 5751..... | Use 12AX7 Card. | |
| 5763..... | A4 B5 C3 C7 D8 E6 G1 I6 I10 J6 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 5814A ..... | Use 12AU7 Card. | |
| 5824..... | Use 25B6 Card. | |
| 5829..... | A3 B4 B5 C2 C7 F1 G6 I6 I10 K8 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3 |
| 5842/417A .... | A3 B9 C6 D4 G1 I7 I9 J1 K4 L1 L6 L8 M5 M10 N2 N9 | For gas test, see instructions |
| 5844..... | A3 B4 C7 D5 D6 F2 G1 J2 K10 L1 L6 L8 M5 M10 N2 N9 | Test P1 and P2 |
| 5847/E182F/ 404A ..... | A9 B3 C4 D1 E8 G6 I8 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 5871..... | Use 6V6 Card. | |
| 5879..... | A4 B5 C3 C9 D1 E7 G8 I6 I10 J6 K8 L1 M5 M10 N2 N9 | |
| 5881..... | Use 6L6 Card. | |
| 5896..... | A3 B4 B6 C2 C7 F1 G5 I6 I10 K7 K8 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| 5897..... | Use 5718 Card. | |
| 5899..... | A3 B6 C2 D1 E7 G5 I9 I10 J1 K7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 5902..... | A3 B6 C2 D1 E7 G5 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 5910..... | Use 1U4 Card. | |
| 5915..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J6 K5 K6 L1 M5 M10 N2 N9 | |
| 5930..... | Use 2A3 Card. | |
| 5931..... | Use 5U4G Card. | |
| 5932..... | Use 6L6G Card. | |
| 5961..... | Use 6SA7 Card. | |
| 5963..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J1 K6 K7 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2 |

| | | |
|---|---|---|
| 5964..... | A3 B4 C7 D5 D6 F1 G2 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 5965..... | A4 B5 C8 C3 D2 D7 F6 G1 I6 I10 J4 K5 L1 L6 L7 M2 M10 N4 N9 | Special Gas Test |
| 5992..... | Use 6V6 Card. | |
| 6005..... | Use 6AQ5 Card. | |
| 6006..... | Use 6SG7 Card. | |
| 6021..... | A3 B6 C4 C5 D2 D7 F1 G8 I6 I8 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6028..... | Use 6AK5 Card. | |
| 6046..... | Use 25L6 Card. | |
| 6057..... | Use 12AX7 Card. | |
| 6058..... | Use 6AL5 Card. | |
| 6060..... | Use 12AT7 Card. | |
| 6063..... | Use 6X4 Card. | |
| 6066..... | Use 6AT6 Cards. | |
| 6067..... | Use 12AU7 Card. | |
| 6072..... | Use 12AY7 Card. | |
| 6080..... | Use 6AS7 Card. | |
| 6087..... | Use 5Y3-GT Card. | |
| 6088/12679/ 12680..... | A5 B3 D4 E2 G1 J7 K10 L5 M2 M6 N1 N6 | |
| 6095..... | Use 6AQ5 Card. | |
| 6096..... | Use 6AK5 Card. | |
| 6097..... | Use 6AL5 Card. | |
| 6098..... | Use 6AR6 Card. | |
| 6100..... | Use 6C4 Card. | |
| 6101..... | Use 6J6 Card. | |
| 6106..... | Use 5Y3 Card. | |
| 6113..... | Use 6SL7 Card. | |
| 6118..... | Use 6Q7 Cards. | |
| 6134..... | Use 6AC7 Card. | |
| 6135..... | Use 6C4 Card. | |
| 6136..... | Use 6AU6 Card. | |
| 6146..... | A2 B7 C1 D5 E3 G10 I9 I10 J1 K3 K4 L1 L6 L7 M3 M10 N1 N9 | |
| 6159..... | A2 B7 C1 D5 E3 G10 I9 I10 J1 K3 K4 L1 L6 L7 M3 M10 N1 N8 | |
| 6180..... | Use 6SN7 Card. | |
| 6186..... | Use 6AG5 Card. | |
| 6187..... | Use 6AS6 Card. | |
| 6188..... | Use 6SU7 Card. | |
| 6189..... | Use 12AU7 Card. | |
| 6197..... | A4 B5 C1 C7 D2 E3 G6 I6 I10 J5 K6 L1 L6 L8 M3 M10 N1 N9 | |
| 6201..... | Use 12AT7 Card. | |
| 6202..... | Use 6X4 Card. | |
| 6211..... | A4 B5 C3 C8 D2 D7 F6 C1 I6 I9 J2 K3 L1 L6 L7 M2 M10 N4 N9 | Test P1 and P2 |
| 6227..... | A4 B5 C3 C9 D2 E8 G7 I7 I10 J1 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6265..... | Use 6BH6 Card. | |
| 6267/EF86.... | A4 B2 B5 B7 B8 C3 D9 E1 G6 I6 I9 J3 K5 K6 L1 M5 M10 N2 N9 | |
| 6336..... | A7 B7 C3 C6 D1 D4 F2 G5 I9 I10 J1 K6 L1 L6 L7 M3 M10 N2 N9 | Test P1 and P2 |
| 6386..... | A1 B5 B9 C2 C8 D3 D7 F4 G6 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2 |
| 6463..... | A4 B5 C2 C7 D3 D8 F1 G6 J1 K3 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2 |
| 6485..... | Use 6AH6 Card. | |

| | | |
|---|---|---|
| 6550..... | A2 B7 C1 C8 D5 E4 G3 I6 I10 J9 K8 L1 L6 L8 M4 M10 N2 N9 | |
| 6660..... | Use 6BA6 Card. | |
| 6661..... | Use 6BH6 Card. | |
| 6662..... | Use 6BJ6 Card. | |
| 6663..... | Use 6AL5 Card. | |
| 6669..... | Use 6AQ5 Card. | |
| 6677..... | Use 6CL6 Card. | |
| 6678..... | Use 6U8 Cards. | |
| 6679..... | Use 12AT7 Card. | |
| 6680..... | Use 12AU7 Card. | |
| 6681..... | Use 12AX7 Card. | |
| 6922..... | Use 6DJ8 Card. | |
| 6927..... | Use 6J6 Card. | |
| 6928..... | Use 6AQ5 Card. | |
| 6939..... | A4 B5 C2 D1 D3 E7 F8 G6 I7 I10 J1 K7 L1 L6 L8 M2 M10 N4 N9 | Test P1 and P2 |
| 6973..... | A4 B5 C7 D3 E1 G9 I6 I10 J6 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6973..... | A4 B5 C7 D3 E1 G9 I6 I10 J8 K6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 7025..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. For gas test, see instructions |
| 7027..... | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M5 M10 N2 N9 | This card can be used to test all 6L6 and 5881 tubes, but the 6L6 card will not test this tube. |
| 9001..... | A3 B4 C7 D1 E6 G5 J6 K7 K8 L1 M5 M10 N2 N9 | |
| 9002..... | A3 B4 C2 D6 G1 I6 I10 J6 K5 L1 M5 M10 N2 N9 | For gas test, see instructions |
| 9003..... | A3 B4 C2 D1 E6 G5 I6 I10 J6 K5 K6 L1 M5 M10 N2 N9 | |
| 12679..... | See 6088/12679/12680 | |
| 12680..... | See 6088/12679/12680 | |

## CARD-PUNCH AND INTERCHANGEABILITY DATA FOR FOREIGN TUBE TYPES

| | |
|---|---|
| 1C2 ..... | Use 1AC6 Card. |
| 1D13 ..... | Use 1A3 Card. |
| 1F3 ..... | Use 1T4 Card. |
| 1FD9..... | Use 1S5 Card. |
| 1P10 ..... | Use 3S4 Card. |
| 1P11 ..... | Use 3V4 Card. |
| 6M1 ..... | Use 6U5 Card. |
| 7D9 ..... | Use 6AM5 Card. |
| 8D3 ..... | Use 6AM6 Card. |
| 63ME..... | Use 6U5 Card. |
| 85A2 ..... | Use OG3 Card. |
| 108C1 ..... | Use OB2 Card. |
| 150C2 ..... | Use OA2 Card. |
| 150C3 ..... | Use OD3 Card. |
| B36 ..... | Use 12SN7 Card. |
| B65 ..... | Use 6SN7 Card. |
| B152 ..... | Use 12AT7 Card. |
| B309 ..... | Use 12AT7 Card. |
| B339 ..... | Use 12AX7 Card. |
| BPMO4 ..... | Use 6AQ5 Card. |
| D63 ..... | Use 6H6 Card. |
| D77 ..... | Use 6AL5 Card. |
| D152 ..... | Use 6AL5 Card. |
| DA90..... | Use 1A3 Card. |
| DAC32..... | Use 1H5 Card. |
| DAF91..... | Use 1S5 Card. |
| DAF92..... | Use 1U5 Card. |
| DAF96..... | Use 1AH5 Card. |
| DC80..... | Use 1E3 Card. |
| DCC90..... | Use 3A5 Card. |
| DD6..... | Use 6AL5 Card. |
| DDR7..... | Use 6AM5 Card. |
| DF33..... | Use 1N5 Card. |
| DF62..... | Use 1AD4 Card. |
| DF91..... | Use 1T4 Card. |
| DF92..... | Use 1L4 Card. |
| DF96..... | Use 1AF4 Card. |
| DF97..... | Use 1AN5 Card. |
| DF652..... | Use 1AD4 Card. |
| DF904..... | Use 1U4 Card. |
| DH63..... | Use 6Q7 Card. |
| DH77..... | Use 6AT6 Card. |
| DH149..... | Use 7C6 Card. |
| DK32..... | Use 1A7 Card. |
| DK91..... | Use 1R5 Card. |
| DK92..... | Use 1AC6 Card. |
| DK96..... | Use 1AB6 Card. |
| DL33..... | Use 3Q5 Card. |
| DL35..... | Use 1C5 Card. |
| DL36..... | Use 1Q5 Card. |
| DL91..... | Use 1S4 Card. |

| | | |
|---|---|---|
| DL92..... | Use 3S4 Card. | |
| DL93..... | Use 3A4 Card. | |
| DL94..... | Use 3V4 Card. | |
| DL95..... | Use 3Q4 Card. | |
| DL96..... | Use 3C4 Card. | |
| DL98..... | Use 3B4 Card. | |
| DL620..... | Use 5672 Card. | |
| DM70..... | Use 1M3 Card. | |
| DP61..... | Use 6AK5 Card. | |
| DY30..... | Use 1B3 Card. | |
| DY80..... | Use 1X2 Card. | |
| DY87..... | Use 1S2 Card. | |
| E88CC..... | Use 6DJ8 Card. | |
| E182F..... | Use 5847 Card. | |
| EAA91..... | Use 6AL5 Card. | |
| EABC80..... | Use 6T8 Card. | |
| EAF42..... | Use 6CT7 Card. | |
| EB34..... | Use 6H6 Card. | |
| EB91..... | Use 6AL5 Card. | |
| EBC33..... Triode Unit | A2 B7 C1 C8 D10 G3 J4 K6 L1 M5 M10 N2 N9 | |
| EBC33..... Diode Unit | A2 B7 C1 C8 F5 G4 K6 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4 |
| EBC41..... | Use 6CV7 Card. | |
| EBC80..... | Use 6BD7 Card. | |
| EBC81..... | Use 6BD7 Card. | |
| EBC90..... | Use 6AT6 Card. | |
| EBC91..... | Use 6AV6 Card. | |
| EBF32..... | Use 6B8 Card. | |
| EBF80..... | Use 6N8 Card. | |
| EBF81..... | Use 6AD8 Card. | |
| EC70..... | Use 6K4 Card. | |
| EC80..... | Use 6Q4 Card. | |
| EC81..... | Use 6R4 Card. | |
| EC84..... | Use 6AJ4 Card. | |
| EC90..... | Use 6C4 Card. | |
| EC91..... | Use 6AQ4 Card. | |
| EC92..... | Use 6AB4 Card. | |
| EC93..... | Use 6BS4 Card. | |
| EC94..... | Use 6AF4 Card. | |
| ECC32..... | Use 6SN7 Card. | |
| ECC33..... | A7 B8 C3 C6 D1 D4 F2 G5 J2 K2 L1 M5 M10 N2 N9 | Test P1 and P2. |
| ECC35..... | A7 B8 C3 C6 D1 D4 F2 G5 J3 K8 L1 M5 M10 N2 N9 | Test P1 and P2. For gas test, see instructions |
| ECC81..... | Use 12AT7 Card. | |
| ECC82..... | Use 12AU7 Card. | |
| ECC83..... | Use 12AX7 Card. | |
| ECC84..... | Use 6CW7 Card. | |
| ECC85..... | Use 6AQ8 Card. | |
| ECC88..... | Use 6DJ8 Card. | |
| ECC91..... | Use 6J6 Card. | |
| ECC189..... | Use 6ES8 Card. | |
| ECF80..... | Use 6BL8 Card. | |
| ECF82..... | Use 6U8 Card. | |
| ECH42..... | Use 7J7 Card. | |
| ECH80..... | Use 6AN7 Card. | |

| | | |
|---|---|---|
| ECH81..... | Use 6AJ8 Card. | |
| ECL80..... | Use 6AB8 Card. | |
| ECL82..... | Use 6BM8 Card. | |
| EF40..... | A1 B8 C4 C7 D5 E6 G2 J4 K7 K8 L1 M5 M10 N2 N9 | Use special socket adapter |
| EF80..... | Use 6BX6 Card. | |
| EF81..... | Use 6BH5 Card. | |
| EF85..... | Use 6BY7 Card. | |
| EF86..... | Use 6CF8 Card. | |
| EF89..... | Use 6DA6 Card. | |
| EF91..... | Use 6AM6 Card. | |
| EF92..... | Use 6CQ6 Card. | |
| EF93..... | Use 6BA6 Card. | |
| EF94..... | Use 6AU6 Card. | |
| EF95..... | Use 6AK5 Card. | |
| EF96..... | Use 6AG5 Card. | |
| EF804..... | A4 B1 B2 B5 C3 D9 E8 G7 I6 I10 J3 K4 K5 L1 M5 M10 N2 N9 | |
| EH90..... | Use 6CS6 Card. | |
| EK90..... | Use 6BE6 Card. | |
| EL22..... | Use 7B5 Card. | |
| EL33..... | Use 6AG6 Card. | |
| EL34..... | Use 6CA7 Card. | |
| EL35..... | Use 6L6 Card. | |
| EL37..... | A2 B7 C8 D5 E4 G3 I8 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| EL38..... | A2 B7 C8 D5 E4 G10 I8 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| EL41..... | Use 6CK5 Card. | |
| EL80..... | Use 6M5 Card. | |
| EL81..... | Use 6CJ6 Card. | |
| EL83..... | Use 6CK6 Card. | |
| EL84..... | Use 6BQ5 Card. | |
| EL85..... | Use 6BN5 Card. | |
| EL86..... | Use 6CW5 Card. | |
| EL90..... | Use 6AQ5 Card. | |
| EL91..... | Use 6AM5 Card. | |
| EL95..... | Use 6DL5 Card. | |
| EL822..... | Use 6CH6 Card. | |
| EM34..... | Use 6CD7 Card. | |
| EM35..... | Use 6U5 Card. | |
| EM80..... | Use 6BR5 Card. | |
| EM81..... | Use 6DA5 Card. | |
| EM84..... | Use 6FG6 Card. | |
| EQ80..... | Use 6BE7 Card. | |
| EY51..... | Use 6X2 Card. | |
| EY80..... | Use 6U3 Card. | |
| EY81..... | Use 6R3 Card. | |
| EY86..... | Use 6S2 Card. | |
| EZ35..... | Use 6X5 Card. | |
| EZ40..... | Use 6BT4 Card. | |
| EZ80..... | Use 6V4 Card. | |
| EZ81..... | Use 6CA4 Card. | |
| EZ90..... | Use 6X4 Card. | |
| FW4/800..... | A3 B4 F2 G1 K2 L5 L6 L10 M5 M6 N1 N6 | Test P1 and P2. Reject if below 4. Use special socket adapter |
| GZ30..... | Use 5Z4 Card. | |

| | |
|---|---|
| GZ31..... | Use 5U4 Card. |
| GZ32..... | Use 5V4 Card. |
| GZ34..... | Use 5AR4 Card. |
| H63 ..... | Use 6F5 Card. |
| HBC90..... | Use 12AT6 Card. |
| HBC91..... | Use 12AV6 Card. |
| HD30..... | Use 3B4 Card. |
| HF93..... | Use 12BA6 Card. |
| HF94..... | Use 12AU6 Card. |
| HK90..... | Use 12BE6 Card. |
| HL90..... | Use 19AQ5 Card. |
| HL92..... | Use 50C5 Card. |
| HM04..... | Use 6BE6 Card. |
| HY90..... | Use 35W4 Card. |
| KT32..... | Use 25L6 Card. |
| KT61..... | Use 6AG6 Card. |
| KT63..... | Use 6F6 Card. |
| KT66..... | A2 B1 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M4 M10 N2 N9 |
| KT88..... | A2 B7 C8 D5 E4 G3 I6 I10 J4 K6 L1 L6 L8 M4 M10 N2 N9 |
| KTW63..... | Use 6K7 Card. |
| L77 ..... | Use 6C4 Card. |
| N18 ..... | Use 3Q4 Card. |
| N77 ..... | Use 6AM5 Card. |
| N78 ..... | Use 6BJ5 Card. |
| N147 ..... | Use 6AG6 Card. |
| N727 ..... | Use 6AQ5 Card. |
| PABC80 ..... | Use 9AK8 Card. |
| PCC84..... | Use 7AN7 Card. |
| PCC85..... | Use 9AQ8 Card. |
| PCC88..... | Use 7DJ8 Card. |
| PCF80..... | Use 9A8 Card. |
| PCF82..... | Use 9U8 Card. |
| PCL82..... | Use 16A8 Card. |
| PL81..... | Use 21A6 Card. |
| PL82..... | Use 16A5 Card. |
| PL83..... | Use 15A6 Card. |
| PY31..... | Use 25Y4 Card. |
| PY81..... | Use 17Z3 Card. |
| U50 ..... | Use 5Y3 Card. |
| U52 ..... | Use 5U4 Card. |
| UB91..... | Use 12AL5 Card. |
| UBC41..... | Use 14L7 Card. |
| UCH42..... | Use 14K7 Card. |
| UCH81..... | Use 19AJ8 Card. |
| UF41..... | Use 12AC5 Card. |
| UF89..... | Use 12DA6 Card. |
| UQ80..... | Use 12BE7 Card. |
| X18 ..... | Use 1AC6 Card. |
| X79 ..... | Use 6AE8 Card. |
| X727 ..... | Use 6BE6 Card. |
| XXD..... | Use 7AF7 Card. |
| Y61 ..... | Use 6U5 Card. |
| Y63 ..... | Use 6U5 Card. |
| Z14 ..... | Use 1N5 Card. |
| Z719 ..... | Use 6BX6 Card. |

SPACE BELOW FOR NEW CARD-PUNCH DATA

RCA

PRICE ONE DOLLAR

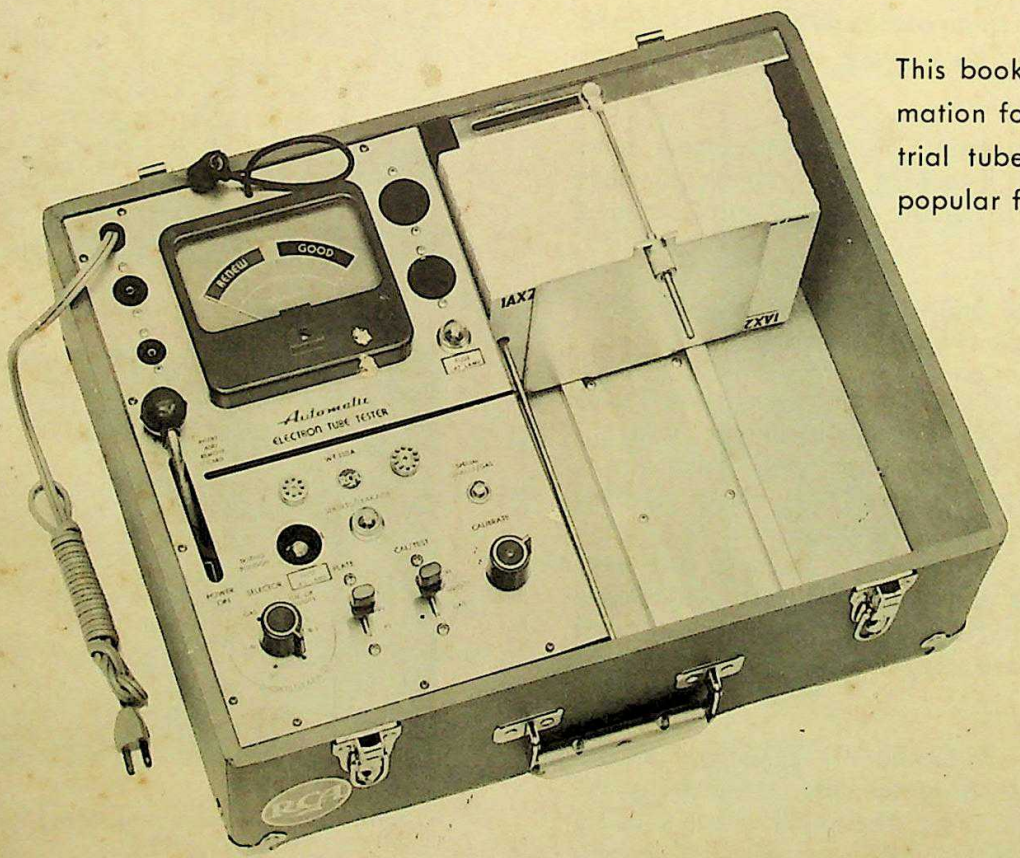
# CARD PUNCH DATA

# for

# RCA WT-110A

# AUTOMATIC ELECTRON-TUBE TESTER

**JANUARY 1961**




This booklet provides card-punching information for over 1,400 receiving and industrial tube types. It also includes data on popular foreign types in a separate listing.

RADIO CORPORATION OF AMERICA
ELECTRON TUBE DIVISION
Electronic Instruments Section
HARRISON, N. J.
Camden, N. J.

All Rights Reserved
Tmk.®, Marca Registrada

1CE-234 1-61
Printed in U.S.A.

# PREPARING NEW PUNCHED CARDS

To test tube-types not included in the card file, you can punch a new card quickly and easily. A master punch card (Stock No. 215426) is supplied with your WT-110A, and should be kept at the front of the card file in the instrument. In addition, you will need the package of unpunched cards (WG-325A), and the WG-326A card punch, also supplied with your instrument. A sharp pencil and a few paper clips round out the materials you will need. You can prepare a new card anywhere, in-or-away from the test bench, by carefully following the procedure outlined below:

1. Place the master punch card on top of a blank card, with the large hole in the blank card on the right-hand side.

2. Carefully line up the bottom edges and index slots of both cards. Fasten together with three or four paper clips (see fig. 2).

3. With a sharp-pointed pencil, inscribe only those holes called for in the hole punching instructions, marking through the hole in the master card and onto the blank card (see fig. 3).

4. Recheck the encircled holes with the hole-punching instructions for the particular tube-type.

5. Remove the paper clips and master punch card. Punch out all of the penciled circles on the blank card with the WG-326A accessory card punch (see fig. 4). Take care to center the penciled circles exactly in the die by sighting through the hole in the top of the punch.

6. With a lead pencil mark the tube-type number and testing instructions on the card. The lettering can be protected by spraying the finished card with a light coating of plastic.

You can add or remove cards from the WT-110A card file by unscrewing the file rod at the front of the case, and pushing the rod out through the rear eyelet. Insert the newly punched cards in their proper numerical-alphabetical order, and reinstall the rod.

Figure 1. Items required for preparing punched cards. Master Punched Card is furnished with the WT-110A.

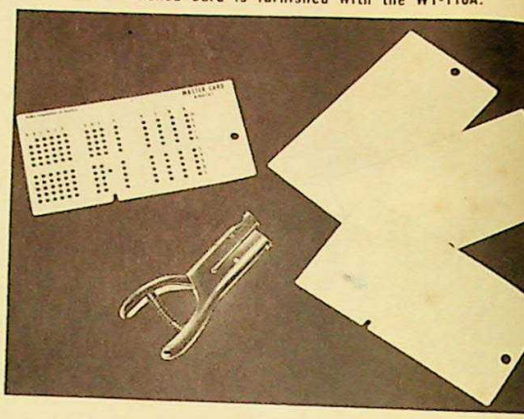


Figure 2. Line up index slots and bottoms of Master Punched Card and blank card. Clip two cards together.

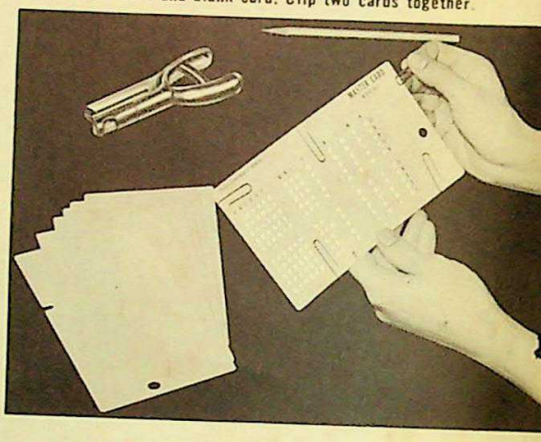


Figure 3. Use sharp-pointed pencil to inscribe hole outlines on blank card.

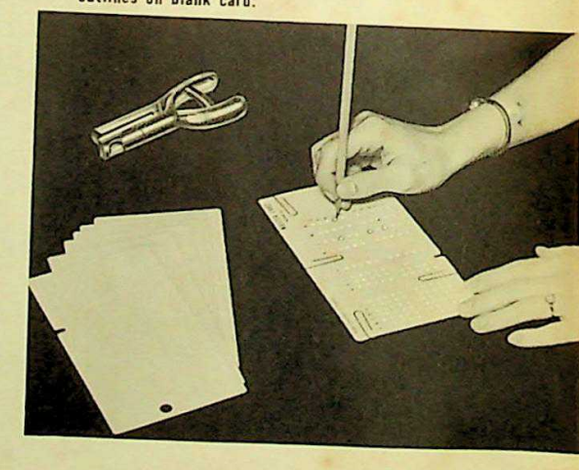
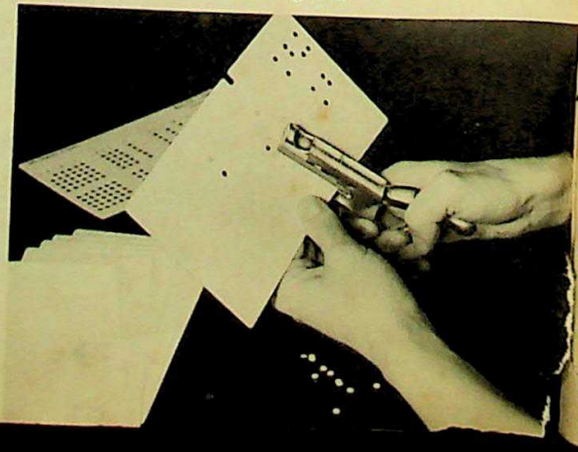


Figure 4. Center each penciled outline exactly in die on top of punch before punching hole.



The card punch data is based upon the normal operation of each basic tube-type. Although various suffixes may appear after the basic tube designation, the electrical characteristics of the tube are basically the same, and the tube is to be tested using the test card for the basic tube-type. For example, a tube such as a 6AK5-W would be tested with a basic 6AK5 testing card.

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 0A2 | A8 G1 G5 K9 L1 L6 L9 M5 M10 N5 N7 | Use WG-324A Adapter. |
| 0A3 | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M9 N5 N8 | Use WG-324A Adapter. |
| 0B2 | A8 G1 G5 K9 L1 L6 L9 M5 M10 N5 N8 | Use WG-324A Adapter. |
| 0B3 (VR90) | A8 D2 D4 D7 G5 K4 L1 L6 L8 M5 M10 N5 N8 | Regulator Tube. Use WG-324A Adapter. |
| 0C2 | A8 G1 G5 K9 L1 L6 L9 M5 M9 N5 N8 | Use WG-324A Adapter. |
| 0C3 | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M10 N5 N8 | G1 shows short. Use WG-324A Adapter. |
| 0D3 | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M10 N5 N7 | G1 shows short. WG-324A Adapter. |
| 0G3 (85A2) | A8 G1 K2 L1 L6 L7 M5 M9 N5 N8 | Regulator Tube. Use WG-324A Adapter. |
| 0Z4 | A4 B7 F3 G5 K5 L5 L6 L10 M5 M6 N1 N8 | Test P1 and P2. Use WG-324A Adapter. |
| 1A3 | A1 B7 C3 G2 K10 L3 M3 M6 N5 N6 | Reject if below 2. |
| 1A5GT | A2 B7 D5 E4 G3 J6 K4 L1 M5 M6 N3 N6 | |
| 1A6 | A6 B1 D4 D10 E5 G2 G3 J10 K7 L1 M3 M6 N2 N6 | |
| 1A7GT | A2 B1 B3 B6 B7 B10 D5 G4 J9 K6 L1 M5 M6 N3 N6 | |
| 1AB5 | A1 B7 B8 D6 E3 G2 J3 K4 L1 M2 M6 N1 N6 | |
| 1AB6 (DK96) | A1 B4 B7 D6 E3 E5 G2 J6 K5 L1 M5 M6 N3 N6 | |
| 1AC6 (DK92) | A1 B4 B7 D6 E3 E5 G2 J7 K6 L1 M5 M6 N3 N6 | |
| 1AD4 | A5 B3 D4 E2 G1 J7 K6 L5 M5 M6 N3 N6 | |
| 1AD5 | A5 B4 D2 E8 G7 J6 K7 L1 M2 M6 N1 N6 | Use WG-339A Adapter. |
| 1AF4 | A1 B7 D6 F3 G2 J6 K9 L1 L6 L7 M5 M6 N3 N6 | |
| 1AG4 | A3 B5 D4 E2 G1 J10 K10 L5 M2 M6 N1 N6 | |
| 1AG5 Pentode Unit | A6 B4 D5 E2 G1 J7 K10 L5 M2 M6 N1 N6 | Reject if below 3. |
| 1AG5 Diode Unit | A6 B1 B2 B4 B5 G3 K10 L3 M2 M6 N1 N6 | Reject if below 2. |
| 1AH4 | A5 B3 D4 E2 G1 J5 K8 L5 M5 M6 N3 N6 | Depress Special Leakage/Gas Button in gas test. |
| 1AH5 (DAF96) Pentode Unit | A7 B1 D6 E4 G5 J1 K9 L1 M5 M6 N3 N6 | |
| 1AH5 (DAF96) Diode Unit | A7 B1 G3 K10 L3 M5 M6 N3 N6 | Reject if below 3. |
| 1AJ4 (DF96) | A7 B1 D6 E3 G2 J4 K4 L1 M5 M6 N3 N6 | |
| 1AJ5 Diode Unit | A6 B4 G3 K10 L3 M5 M6 N3 N6 | Reject if below 2. |
| 1AJ5 Pentode Unit | A6 B4 D5 E2 G1 J8 K10 L5 M5 M6 N3 N6 | |
| 1AK4 | A5 B3 D4 E2 G1 J5 K9 L5 M2 M6 N1 N6 | |
| 1AN5/DF97 | A7 B1 B4 B5 D6 E3 G2 J2 K3 K4 L1 M5 M6 N3 N6 | |
| 1AX2 | A2 B1 G10 K10 L5 M5 M6 N3 N6 | Reject if below 2. |
| 1B3GT | A7 B2 G10 K5 L5 M1 M6 N2 N6 | Reject if below 3. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 1C5GT | A2 B7 D5 E4 G3 J9 K6 L5 M5 M6 N3 N6 | |
| 1C6 | A6 B1 D4 D10 E5 G2 G3 J10 K10 L1 L6 L7 M3 M6 N2 N6 | |
| 1C7G | A2 B7 D5 D10 E4 G3 G6 J10 K10 L1 L6 L7 M3 M6 N2 N6 | |
| 1D7G | A2 B7 D5 D10 E4 G3 G6 J10 K8 L1 M3 M6 N2 N6 | |
| 1DN5 Pentode Unit | A7 B1 D6 E3 G2 J5 K8 L5 M5 M6 N3 N6 | |
| 1DN5 Diode Unit | A7 B1 G4 K7 L4 M5 M6 N3 N6 | Reject if below 2. |
| 1E5GP | A2 B7 D10 E4 G3 J10 K9 L1 M3 M6 N2 N6 | |
| 1E7GT | A2 B7 D4 D5 E8 F3 G6 J6 K7 L1 L6 L7 M3 M6 N2 N6 | Test P1 and P2. |
| 1E8 | A5 B4 D2 D8 E7 G6 J1 K5 L5 M2 M6 N1 N6 | Use WG-339A Adapter. |
| 1F4 | A1 B5 D3 E4 G2 J6 K7 L1 L6 L7 M3 M6 N2 N6 | |
| 1F5G | A2 B7 D5 E4 G3 J7 K6 L1 L6 L7 M3 M6 N2 N6 | |
| 1F6 Diode Unit | A1 B6 F5 G4 K10 L3 M3 M6 N2 N6 | Test P1 and P2. Reject if below 2. |
| 1F6 Pentode Unit | A1 B6 D10 E3 G2 J6 K3 L1 M3 M6 N2 N6 | |
| 1F7G Diode Unit | A2 B7 F4 G5 K5 L4 M3 M6 N2 N6 | Test P1 and P2. Reject if below 2. |
| 1F7G Pentode Unit | A2 B7 D10 E6 G3 J9 K5 L1 M3 M6 N2 N6 | |
| 1G3GT/1B3GT | Use 1B3GT Card. | |
| 1G4GT | A2 B7 D5 G3 J9 K4 L1 M5 M6 N3 N6 | |
| 1G6GT | A2 B7 D4 D5 F3 G6 J2 KI0 L5 M5 M6 N3 N6 | Test P1 and P2. |
| 1H2 | A2 B9 G10 K10 L5 L6 L7 M5 M6 N3 N6 | Reject if below 2. |
| 1H5GT Diode Unit | A2 B1 B7 G5 K10 L3 M5 M6 N3 N6 | Reject if below 2. |
| 1H5GT Triode Unit | A2 B1 B7 D10 G3 J1 K10 L5 M5 M6 N3 N6 | |
| 1H6G Diode Unit 1 | A2 B7 G5 K9 L3 M3 M6 N2 N6 | Reject if below 3. |
| 1H6G Diode Unit 2 | A7 B2 G4 K9 L3 M3 M6 N2 N6 | Reject if below 3. |
| 1H6G Triode Unit | A2 B7 D6 G3 J5 K6 L1 M3 M6 N2 N6 | Reject if below 3. |
| 1J3 | A7 B2 G10 K10 L5 M1 M6 N2 N6 | Reject if below 3. |
| 1J5G | A2 B7 D5 E4 G3 J10 K2 L1 M3 M6 N2 N6 | |
| 1J6G | A2 B7 D4 D5 F3 G6 J2 K2 L1 M3 M6 N2 N6 | Test P1 and P2. |
| 1K3 | A7 B2 G10 K10 L5 M1 M6 N2 N6 | Reject if below 3. |
| 1L4 | A1 B7 D6 E3 G2 J8 K6 L1 M5 M6 N3 N6 | |
| 1L6 | A7 B1 D4 E3 G2 G5 G6 J6 K6 L1 M5 M6 N3 N6 | |
| 1LA4 | A1 B8 D6 E3 G2 J7 K3 L1 M5 M6 N3 N6 | |
| 1LA6 | A1 B8 D4 G2 G3 G5 G6 J7 K4 L1 M5 M6 N3 N6 | |
| 1LB4 | A8 B1 D6 E3 G2 J2 K2 L1 M5 M6 N3 N6 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| *1LC5 | A1 B8 C4 D6 E3 G2 I6 I10 J3 K7 L5 M5 M6 N3 N6 | |
| 1LC6 | A8 B1 D4 E3 G2 G5 G6 J4 K5 L1 M5 M6 N3 N6 | |
| 1LD5 Diode Unit | A1 B8 G4 K10 L3 M5 M6 N3 N6 | Reject if below 1. |
| 1LD5 Pentode Unit | A1 B8 D6 E3 G2 J6 K8 L1 M5 M6 N3 N6 | |
| 1LE3 | A1 B8 D6 G2 J2 K3 L1 M5 M6 N3 N6 | |
| 1LG5 | A1 B8 D6 E3 G2 J2 K6 L5 M5 M6 N3 N6 | |
| 1LH4 Diode Unit | A1 B8 G4 K10 L3 M5 M6 N3 N6 | Reject if below 2. |
| 1LH4 Triode Unit | A1 B8 D6 G2 J3 K10 L1 M5 M6 N3 N6 | Depress Special Leakage/Gas Button in gas test. |
| 1LN5 | A1 B4 B5 B8 D6 E3 G2 J2 K7 L1 M5 M6 N3 N6 | |
| 1M3/DM70 Card 1 | A4 B5 D1 G8 J1 L1 M5 M6 N3 N6 | Eye tube—Full illumination. Use WG-339A Adapter. |
| 1M3/DM70 Card 2 | A4 B5 D1 G8 J10 L1 M5 M6 N3 N6 | Eye tube—¼" illumination. Use WG-339A Adapter. |
| 1N2 | A7 B2 G10 K5 L5 M1 M6 N2 N6 | Reject if below 3. |
| 1N3 | Same as 1M3. | |
| 1N5GT | A2 B1 B7 D10 E4 G3 J2 K7 L1 M5 M6 N3 N6 | |
| 1P5GT | A2 B7 D10 E4 G3 J3 K6 L1 M5 M6 N3 N6 | |
| *1Q5GT | A2 B7 D5 E4 G3 I6 I10 J9 K5 L5 M5 M6 N3 N6 | |
| 1R4/1294 | A1 B8 C7 G4 K10 L3 M5 M6 N3 N6 | Reject if below 3. |
| 1R5 | A7 B1 B5 B6 D4 G2 G3 I6 I10 J6 K3 L1 M5 M6 N3 N6 | |
| 1S2 (DY87) | A9 B5 G10 K10 L4 M5 M6 N3 N6 | Reject if below 4. |
| 1S4 | A7 B1 B5 D3 E4 G2 G6 J9 K5 L1 L6 L7 M5 M6 N3 N6 | |
| 1S5 Diode Unit | A7 B1 G3 K10 L3 M5 M6 N3 N6 | Reject if below 2. |
| 1S5 Pentode Unit | A7 B1 D6 E4 G5 I6 I10 J6 K10 L1 L6 L7 M5 M6 N3 N6 | |
| 1T4 | A1 B7 D6 E3 G2 J8 K7 L1 M5 M6 N3 N6 | |
| 1T5GT | A2 B7 D5 E4 G3 J9 K1 L1 M5 M6 N3 N6 | |
| 1U4 | A1 B7 D6 E3 G2 J6 K10 L1 M5 M6 N3 N6 | |
| 1U5 Diode Unit | A7 B1 G4 K10 L3 M5 M6 N3 N6 | Reject if below 2. |
| 1U5 Pentode Unit | A7 B1 D6 E3 G2 J5 K10 L1 L6 L7 M5 M6 N3 N6 | |
| 1U6 | A7 B1 B6 D4 E5 G2 G3 J6 K8 L1 M5 M6 N3 N6 | |
| 1V | A1 B4 C3 G2 K5 L4 L6 L9 M5 M10 N2 N9 | Reject if below 4. |
| 1V2 | A4 B5 G9 K9 L5 M4 M6 N5 N6 | Reject if below 2. |
| 1V6 Pentode Unit | A7 B4 B5 B6 D3 E2 G1 J6 K8 L5 M5 M6 N3 N6 | |
| 1V6 Triode Unit | A4 B1 B2 B3 B7 D5 G6 J8 K9 L5 M2 M6 N1 N6 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 1X2A, B | A2 B1 G10 K5 L5 M1 M6 N2 N6 | Reject if below 3. |
| 1Z2 | A4 B5 G10 K10 L4 M5 M6 N3 N6 | Reject if below 3. |
| 2A3 | A4 B1 D3 G2 J10 K4 L1 L6 L8 M5 M6 N2 N6 | |
| 2A5 | A1 B6 C5 D4 E3 G2 J1 K4 L1 M4 M6 N2 N6 | |
| 2A6 Diode Unit | A1 B6 C5 F3 G4 I6 I10 K10 L3 M4 M6 N2 N6 | Test P1 and P2. Reject if below 2. |
| 2A6 Triode Unit | A1 B6 C5 D10 G2 I6 I10 J2 K8 L1 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2A7 | A1 B7 C6 D5 D10 E3 G2 G4 I6 I10 J9 K9 L1 M4 M6 N2 N6 | |
| 2AF4A | A3 B4 C5 D2 G1 I8 I10 J1 K3 L1 L6 L7 M2 M6 N3 N6 | |
| 2B3 | A2 B7 G10 I6 I10 K4 L5 M3 M6 N2 N6 | Reject if below 4. |
| 2B7 Diode Unit | A1 B7 C6 F5 G4 I6 I10 K10 L3 M4 M6 N2 N6 | Test P1 and P2. Reject if below 2. |
| 2B7 Pentode Unit | A1 B7 C6 D10 E3 G2 I6 I10 J6 K9 L1 M4 M6 N2 N6 | |
| 2BN4 | A3 B4 C1 D2 G5 I7 I8 J1 K4 L1 L6 L7 M2 M6 N3 N6 | |
| 2C40 | A2 B1 B7 C3 C5 C8 D6 G10 I7 I9 J1 K5 K6 L1 L6 L7 M5 M10 N2 N9 | Connect grid ring to pin 6 of loctal socket with short clip lead. Connect cap lead to cap of tube. |
| 2C51 | Use 5670 Card. | |
| 2CY5 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M2 M6 N3 N6 | |
| 2E5 Eye Unit | A1 B6 C5 E4 F2 L1 M4 M6 N2 N6 | Shadow Max.—P1. Shadow Min.—P2. |
| 2E5 Triode Unit | A1 B6 C5 D3 G2 I6 I10 J6 K10 L1 M4 M6 N2 N6 | |
| 2E24 | A2 A7 B1 B8 D5 E3 G10 J9 K8 L1 L6 L7 M2 M6 N4 N6 | |
| 2E26 | A2 B7 B8 C1 D5 E3 G10 I6 I7 J8 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 2E30 | A3 A4 B2 B7 D1 E6 G5 J9 K4 L1 M2 M6 N4 N6 | |
| 2E31 | A5 B3 D4 E2 G1 J8 K10 L5 M2 M6 N1 N6 | Reject if below 2. Depress Special Leakage/Gas Button in gas test. |
| 2E32 | Use 2E31 Card. | |
| 2E35 | A5 B3 D4 E2 G1 J7 K10 L5 M2 M6 N1 N6 | Reject if below 3. |
| 2E36 | Use 2E35 Card. | |
| 2EA5 | A3 B4 C2 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |
| 2EN5 | A3 B4 C5 F2 G7 I6 I10 K7 L3 L6 L8 M3 M6 N2 N6 | Test P1 and P2. Reject if below 4. |
| 2ER5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K8 L1 L6 L8 M3 M6 N2 N6 | |
| 2EV5 | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |
| 2FH5 | A3 B4 B6 C1 C7 D2 G5 I8 I10 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |
| 2FS5 | A3 B4 B6 B7 D2 G5 J2 K3 L1 L6 L7 M3 M6 N2 N6 | |
| 2FV6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |

** Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 2FY5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K10 L1 L6 L9 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2J2 | A2 B9 G10 K10 L5 L6 L7 M3 M6 N2 N6 | Reject if below 2. |
| 2T4 | A3 B4 C5 D2 G1 I8 I9 J1 K1 L1 L6 L7 M3 M6 N2 N6 | |
| 2V2 | A2 B7 G10 K9 L5 L6 L7 M3 M6 N2 N6 | Reject if below 2. |
| 2V3 | A2 B7 G10 K6 L5 M4 M6 N2 N6 | Reject if below 3. |
| 2X2A | A1 B4 G10 I6 I7 L5 L6 L7 M2 M6 N4 N6 | Reject if below 4. |
| 3A2 | A1 B2 G10 K2 L5 M2 M6 N4 N6 | Reject if below 3. |
| 3A3 | A2 B7 G10 K7 L5 M2 M6 N4 N6 | Reject if below 4. |
| 3A4 | A5 B1 B7 D4 E3 G2 J9 K9 L1 L6 L8 M5 M6 N3 N6 | |
| 3A5 | A4 B1 B7 D3 D5 F2 G6 J7 K8 L1 L6 L7 M5 M6 N3 N6 | Test P1 and P2. |
| 3A8GT Diode Unit | A2 B7 G8 K10 L3 M4 M6 N2 N6 | Reject if below 3. |
| 3A8GT Triode Unit | A2 B7 D5 G6 J2 K10 L1 M4 M6 N2 N6 | |
| 3A8GT Pentode Unit | A7 B2 D10 E4 G3 J2 K7 L1 M4 M6 N2 N6 | |
| 3AF4A | A3 B4 C5 D2 G1 I8 I10 J1 K3 L1 L6 L7 M2 M6 N4 N6 | |
| 3AJ8 Triode Unit | A4 B1 B2 B5 B6 B7 C3 D9 G8 I8 I10 J1 K7 L1 L6 L7 M5 M6 N2 N6 | |
| 3AJ8 Heptode Unit | A4 B5 B7 B8 B9 C3 D2 E1 G6 I6 I9 J4 K3 L1 M5 M6 N2 N6 | |
| 3AL5 | A3 B4 C1 C5 F2 G7 I6 I10 K7 L3 L6 L8 M2 M6 N4 N6 | Test P1 and P2. Reject if below 4. |
| 3AU6 | A3 B2 B4 C7 D1 E6 G5 I7 I9 J1 K6 L1 L6 L7 M2 M6 N4 N6 | |
| 3AV6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M6 N4 N6 | Test P1 and P2. Reject if below 4. |
| 3AV6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M2 M6 N4 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3B2 | A2 B7 G10 K9 L5 M4 M6 N2 N6 | Reject if below 4. |
| 3B4 | A4 A5 B2 D3 E1 G7 J10 K7 L1 L6 L7 M2 M6 N1 N6 | |
| 3B7 | A4 B1 B8 D3 D6 F7 G2 J1 K1 L1 M5 M6 N3 N6 | Test P1 and P2. |
| 3BA6 | A3 B2 B4 C7 D1 E6 G5 I7 I10 J1 K6 L1 L6 L7 M2 M6 N4 N6 | |
| 3BC5 | A3 B4 C2 C7 D1 E6 G5 I8 I10 J1 K6 L1 L6 L7 M2 M6 N4 N6 | |
| 3BE6 | A3 B4 C2 C7 D1 G5 G6 I6 I10 J1 K3 L1 L6 L7 M2 M6 N4 N6 | |
| 3BN4 | A3 B4 C1 D2 G5 I7 I8 J1 K4 L1 L6 L7 M2 M6 N4 N6 | |
| 3BN6 | A3 B4 C1 D2 G5 G6 G7 J1 K8 L5 L6 L7 M2 M6 N4 N6 | |
| 3BU8 | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K7 L1 M2 M6 N4 N6 | Test P1 and P2. |
| 3BY6 | A3 B4 C2 D1 D7 E6 G5 I6 I10 J5 K3 L1 M2 M6 N4 N6 | |
| 3BY7 | A4 B5 C1 C3 C9 D2 E8 G7 I6 I7 J1 K6 L1 L6 L7 M2 M6 N4 N6 | |
| 3BZ6 | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K9 L1 L6 L8 M2 M6 N4 N6 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 3C2 | A2 B7 G10 K1 L5 M2 M6 N4 N6 | Reject if below 4. |
| 3C4/DL96 | A1 B7 D6 E3 G2 J9 K3 K4 L1 L6 L7 M4 M6 N2 N6 | |
| 3C6/XXB | A1 A8 B7 D4 D5 F3 G6 J2 K3 L1 M5 M6 N3 N6 | Test P1 and P2. |
| 3CB6 | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K9 L1 L6 L8 M2 M6 N4 N6 | |
| 3CE5 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M2 M6 N4 N6 | |
| 3CF6 | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K9 L1 L6 L8 M2 M6 N4 N6 | |
| 3CS6 | A3 B4 C2 D1 D7 E6 G5 I6 I10 J6 K5 L1 M2 M6 N4 N6 | |
| 3CS6 Grid 1 Test | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K8 L1 M4 M6 N2 N6 | Reject if below 4. |
| 3CS6 Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 I6 I7 J1 K10 L1 M4 M6 N2 N6 | Reject if below 4. |
| 3CY5 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M2 M6 N4 N6 | |
| 3D6/1299 | A1 A8 B7 D6 E3 G2 J7 K4 L1 L6 L7 M5 M6 N3 N6 | |
| 3DG4 | A1 B3 F5 G7 K2 K3 L3 L6 L10 M4 M6 N1 N6 | Test P1 and P2. Reject if below 4. |
| 3DK6 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K2 L1 L6 L7 M2 M6 N4 N6 | |
| 3DT6 | A3 B4 C2 D1 D7 E6 G5 I6 I10 J4 K7 L1 M2 M6 N4 N6 | Reject if below 3. Depress Special Leakage/Gas Button in gas test. |
| 3EA5 | A3 B4 C2 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M4 M6 N2 N6 | |
| 3EJ7 | A4 B5 C1 C6 C9 D2 E8 G7 I6 I10 J2 K4 L1 L6 L8 M4 M6 N2 N6 | |
| 3EH7 | A4 B5 C1 C6 C9 D2 E8 G7 I6 I10 J4 K4 L1 L6 L8 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3ER5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K8 L1 L6 L8 M4 M6 N2 N6 | |
| 3ES5 | A3 B4 B6 B7 D2 G5 J2 K3 L1 L6 L7 M4 M6 N2 N6 | |
| 3EV5 | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K2 L1 L6 L7 M4 M6 N2 N6 | |
| 3FH5 | A3 B4 B6 C1 C7 D2 G5 I8 I10 J1 K2 L1 L6 L7 M4 M6 N2 N6 | |
| 3FY5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K10 L1 L6 L9 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3LF4 | A1 A8 B7 D6 E3 G2 J9 K5 L1 L6 L7 M5 M6 N3 N6 | |
| 3Q4 | A1 A7 B5 D3 E4 G2 G6 J9 K6 L1 L6 L7 M5 M6 N3 N6 | |
| 3Q5G | A7 B2 B8 D5 E4 G3 J9 K3 L1 M5 M6 N3 N6 | |
| *3S4 | A1 B7 D3 E4 G2 J10 K4 L1 M2 M6 N4 N6 | |
| 3V4 | A1 A7 B5 D6 E3 G2 J9 K6 L1 L6 L7 M5 M6 N3 N6 | |
| 4AU6 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K6 L1 L6 L7 M1 M6 N4 N6 | |
| 4BA6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K6 L1 L6 L7 M4 M6 N1 N6 | |
| 4BC5 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M1 M6 N4 N6 | |

* *Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 4BC8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I8 I9 J1 K4 L1 L6 L7 M1 M6 N4 N6 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 4BE6 | A3 B4 C2 C7 D1 G5 G6 I6 I10 J1 K3 L1 L6 L7 M1 M6 N4 N6 | |
| 4BL8 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K5 L1 L6 L7 M5 M6 N1 N6 | |
| 4BL8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M5 M6 N1 N6 | |
| 4BN4 | A3 B4 C1 C6 D2 G5 I7 I8 J1 K4 L1 L6 L7 M4 M6 N1 N6 | |
| 4BN6 | A3 B4 C1 D2 G5 G6 G7 J1 K8 L5 L6 L7 M1 M6 N4 N6 | |
| 4BQ7A | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M1 M6 N4 N6 | Test P1 and P2. Special Leakage Test. |
| 4BS8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I8 I9 J1 K3 L1 L6 L7 M1 M6 N4 N6 | Test P1 and P2. Special Leakage Test. |
| 4BU8 | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K7 L1 M1 M6 N4 N6 | Test P1 and P2. |
| 4BX8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I6 I10 J4 K2 L1 L6 L7 M1 M6 N4 N6 | Test P1 and P2. Special Leakage Test. |
| 4BY6 | A3 B4 C2 D1 D7 E6 G5 I6 I10 J5 K8 L1 L6 L7 M1 M6 N4 N6 | |
| 4BZ6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K6 L1 L6 L8 M1 M6 N4 N6 | |
| 4BZ7 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I8 I9 J1 K4 L1 L6 L7 M1 M6 N4 N6 | Test P1 and P2. Special Leakage Test. |
| 4BZ8 | A4 B5 C3 C8 D2 D7 F1 G6 I7 I9 J1 K2 L1 L6 L7 M4 M6 N1 N6 | Test P1 and P2. Special Leakage Test. |
| 4CB6 | A3 B4 C2 C7 D1 E6 G5 I6 I8 J1 K9 L1 L6 L8 M1 M6 N4 N6 | |
| 4CE5 | A3 B4 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M4 M6 N1 N6 | |
| *4CS6 | A3 B4 B7 C2 D1 G5 G6 I6 I10 J7 K8 L1 L6 L7 M1 M6 N4 N6 | |
| *4CS6 Grid 1 Test | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K8 L1 M4 M6 N1 N6 | Reject if below 4. |
| 4CS6 Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 I6 I7 J1 K10 L1 M4 M6 N1 N6 | Reject if below 4. |
| 4CY5 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M2 M6 N5 N6 | |
| 4DE6 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M1 M6 N5 N6 | |
| 4DK6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K7 L1 L6 L8 M4 M6 N1 N6 | |
| 4DT6 | A3 B4 C2 D1 D7 E6 G5 I6 I10 J4 K7 L1 M1 M6 N4 N6 | Reject if below 3. Depress Special Leakage/Gas Button in gas test. |
| 4EH7 | A4 B5 C1 C6 C9 D2 E8 G7 I6 I10 J4 K4 L1 L6 L8 M1 M6 N4 N6 | Depress Special Leakage/Gas Button in gas test. |
| 4EJ7 | A4 B5 C1 C6 C9 D2 E8 G7 I6 I10 J2 K4 L1 L6 L8 M1 M6 N4 N6 | |
| 4ES8 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I8 J1 K2 L1 L6 L7 M4 M6 N1 N6 | Test P1 and P2. Special Leakage Test. |
| 4EW6 | A3 B4 B7 C2 D1 E6 G5 I7 I9 J1 K7 L1 L6 L8 M1 M6 N4 N6 | Depress Special Leakage/Gas Button in gas test. |
| 4GM6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K6 K7 L1 L6 L8 M4 M6 N1 N6 | |
| 5A6 | A4 B5 C3 C8 D7 E6 G1 J10 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5AM8 Diode Unit | A4 B5 C7 G8 K8 L3 L6 L8 M1 M6 N5 N6 | Reject if below 3. |
| 5AM8 Pentode Unit | A4 B5 C1 C9 D2 E3 G6 I6 I8 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5AN8 Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5AN8 Triode Unit | A4 B5 C3 D2 G1 I6 I8 J6 K3 L1 M1 M6 N5 N6 | |
| 5AQ5 | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M1 M6 N5 N6 | |
| 5AR4 | A2 B8 F4 G6 K6 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5AS4 | A2 B8 F6 G4 K1 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4. |
| 5AS8 Diode Unit | A4 B5 C3 G6 I6 I10 K3 L3 L6 L7 M1 M6 N5 N6 | Reject if below 2. |
| 5AS8 Pentode Unit | A4 B5 C3 C7 D2 E1 G9 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5AT8 Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I6 I7 J1 K6 L1 L6 L7 M1 M6 N5 N6 | |
| 5AT8 Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5AU4 | A2 B8 F4 G6 K1 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5AV8 Pentode Unit | A4 B5 C7 D6 E8 G9 I6 I7 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5AV8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J6 K8 L1 L6 L7 M1 M6 N5 N6 | |
| 5AW4 | A2 B8 F4 G6 K1 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5AZ4 | A2 B8 F4 G6 K7 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4. |
| 5B8 Pentode Unit | A4 B5 C1 C2 C7 D6 E8 G9 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5B8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J6 K8 L1 L6 L7 M1 M6 N5 N6 | |
| 5BE8 Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I7 I10 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5BE8 Triode Unit | A4 B5 C3 D1 G2 I7 I10 J1 K2 L1 L6 L7 M1 M6 N5 N6 | |
| 5BK7A | A4 B5 C3 C8 C9 D2 D7 F1 G6 I7 I10 J1 K1 L1 L6 L7 M1 M6 N5 N6 | Test P1 and P2. Special Leakage Test. |
| 5BQ7A | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M1 M6 N5 N6 | Test P1 and P2. Special Leakage Test. |
| 5BR8 Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5BR8 Triode Unit | A4 B5 C3 D1 G2 I7 I10 J1 K2 L1 L6 L7 M1 M6 N5 N6 | |
| 5BS8 | A4 B5 C3 C8 D2 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M1 M6 N5 N6 | Test P1 and P2. |
| 5BT8 Diode Unit | A4 B5 C3 F1 G2 K9 L3 M1 M6 N5 N6 | Test P1 and P2. Reject if below 4. |
| 5BT8 Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5BW8 Pentode Unit | A4 B5 C7 D6 E8 G9 I7 I10 J1 K6 L1 L6 L7 M5 M6 N1 N6 | |

** Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 5BW8 Diode Unit | A4 B5 C2 F1 G3 I6 I10 K7 L3 L6 L8 M5 M6 N1 N6 | Test P1 and P2. Reject if below 4. |
| 5BZ7 | A4 B5 B9 C3 C8 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M4 M10 N1 N9 | Test P1 and P2. |
| 5CG4 | A2 B8 F4 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5CG8 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5CG8 Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5CL8 Tetrode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 L1 L6 L7 M1 M6 N5 N6 | |
| 5CL8 Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K1 L1 L6 L7 M1 M6 N5 N6 | |
| 5CM6 Pentode Unit | A4 B5 C3 D2 E7 G6 I7 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5CM8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I7 J1 K9 L1 L6 L8 M1 M6 N5 N6 | |
| 5CM8 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J2 K6 L1 M1 M6 N5 N6 | Depress Special Leakage/Gas Button in gas test. |
| 5CQ8 Tetrode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5CQ8 Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K1 L1 L6 L7 M1 M6 N5 N6 | |
| 5CR8 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K10 L1 L6 L8 M5 M6 N1 N6 | |
| 5CR8 Pentode Unit | A4 B5 C3 D2 E7 G6 I7 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5CU4 | A2 B8 C1 F4 G6 I6 I10 K4 L4 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5CZ5 | A4 B5 C7 C8 D3 D6 E1 G9 I6 I10 J8 K1 L1 M1 M6 N5 N6 | |
| 5DB5 | A2 B8 F4 G6 K1 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5DH8 Triode Unit | A4 B5 C3 D1 G2 J1 K6 L1 L6 L7 M4 M10 N1 N9 | |
| 5DH8 Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I7 I10 J1 K7 K8 L1 L6 L8 M4 M10 N1 N9 | |
| 5DJ4 | Use 5U4 Data. | |
| 5EA8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N1 N9 | |
| 5EA8 Triode Unit | A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M5 M10 N1 N9 | |
| 5EH8 Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I10 J2 K4 L1 L6 L7 M5 M10 N1 N9 | |
| 5EH8 Triode Unit | A4 B5 C1 C6 D2 G3 I6 I10 J2 K8 L1 L6 L8 M5 M10 N1 N9 | |
| 5ES8 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I8 J1 K2 L1 L6 L7 M4 M10 N1 N9 | Test P1 and P2. |
| 5EU8 Triode Unit | A4 B5 C6 D2 G3 I8 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5EU8 Pentode Unit | A4 B5 C8 D7 E9 G1 I7 I9 J1 K4 L1 6L L7 M5 M6 N1 N6 | |
| 5FG7 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K4 L1 L6 L7 M5 M6 N1 N6 | |
| 5FG7 Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K3 L1 L6 L8 M5 M6 N1 N6 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 5FV8 Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K1 L1 L6 L7 M5 M6 N1 N6 | |
| 5FV8 Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5GH8 Triode Unit | A4 B5 C8 D9 G1 I8 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5GH8 Pentode Unit | A4 B5 C7 D2 E3 G6 I8 I10 J1 K5 L1 L6 L7 M5 M6 N1 N6 | |
| 5GM6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K6 K7 L1 L6 L8 M4 M10 N1 N9 | |
| 5J6 | A3 B4 C7 D5 D6 F1 G2 I7 I9 J1 K5 L1 L6 L7 M1 M6 N5 N6 | Test P1 and P2. |
| 5R4GY | A2 B8 F6 G4 K4 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5T4 | A2 B1 B8 F6 G4 K1 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4. |
| 5T8 Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M1 M6 N5 N6 | Test P1, P2 and P3. Reject if below 4. |
| 5T8 Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M1 M6 N5 N6 | Depress Special Leakage/Gas Button in gas test. |
| 5U4G, GB | A2 B8 F4 G6 K1 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5U8 Pentode Unit | A4 B5 C7 D2 E3 G6 I7 I10 J1 K6 L1 L6 L7 M1 M6 N5 N6 | |
| 5U8 Triode Unit | A4 B5 C8 D9 G1 I6 I9 J1 K3 L1 L6 L7 M1 M6 N5 N6 | |
| 5V3 | A2 B8 F4 G6 I7 I10 K9 L4 L6 L10 M3 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5V4G | A2 B8 F4 G6 I6 I10 K7 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5V6GT | A2 B7 C8 D5 E4 G3 I6 I7 J1 K1 L1 M1 M6 N5 N6 | |
| 5W4 | A2 B8 F4 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5X4G | A7 B8 F3 G5 K2 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5X8 Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I7 J1 K6 L1 L6 L7 M1 M6 N5 N6 | |
| 5X8 Triode Unit | A4 B5 C6 D2 G3 I7 I9 J1 K4 L1 L6 L7 M1 M6 N5 N6 | |
| 5Y3G, GT | A2 B8 F4 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5Y4G, GT | A7 B8 F3 G5 K7 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5Z3 | A1 B4 F2 G3 K3 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5Z4 | A2 B1 B8 F4 G6 K8 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6A3 | A1 B4 D3 G2 J10 K4 L1 L6 L8 M4 M10 N2 N9 | |
| 6A6 | A1 B7 C4 D3 D5 F2 G6 I6 I10 J4 K7 L1 M3 M10 N1 N9 | Test P1 and P2. |
| 6A7, S | A1 B7 C6 D5 G2 G3 G4 G10 I6 I10 J7 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6A8, G, GT | A2 B1 B7 B8 D5 G3 G4 G6 G10 I6 I10 J7 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6AB4 | A4 B2 B3 C7 D6 G1 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6AB5/6N5 | A1 B6 C5 D3 E4 G2 I6 I10 J2 K10 L1 M5 M10 N2 N9 | Triode Test—P1. Shadow Min.—P1. Shadow Max.—P2. |
| 6AB7/1853 | A2 B1 B3 B7 C5 D4 E6 G8 I6 I10 J3 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AB8/ECL80 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J5 K7 L1 M5 M10 N2 N9 | |
| 6AB8/ECL80 Pentode Unit | A4 B5 B7 C3 D9 E8 G6 I6 I10 J7 K1 K2 L1 M5 M10 N2 N9 | |
| 6AC5G, GT | A2 B7 C8 D5 G3 I7 I9 J1 K9 L1 M3 M10 N1 N9 | |
| 6AC7 | A2 B1 B7 C3 C5 D4 E6 G8 I8 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6AD4 | A3 B6 C5 D1 G8 J1 K5 L1 M5 M10 N2 N9 | |
| 6AD7G Pentode Unit | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 M3 M10 N1 N9 | |
| 6AD7G Triode Unit | A2 B7 C8 D1 G6 I6 I10 J1 K10 L1 M3 M10 N1 N9 | |
| 6AF3 | A4 B5 C10 G9 I6 I10 K5 L4 L6 L10 M4 M10 N1 N9 | |
| 6AF4, A | A3 B4 C5 D2 G1 I8 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6AF6 | A2 B7 C8 E5 G3 G4 L1 M5 M10 N2 N9 | P1—Eyes closed. P2 and P3—Eyes open. No meter reading. |
| 6AG5 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6AG6G/EL33 | A2 B7 C8 D5 E4 G3 I6 I10 J4 K1 L1 L6 L7 M4 M10 N2 N9 | |
| 6AG7 | A7 B1 B2 B3 C5 D4 E6 G8 I6 I10 J4 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6AH4GT | A7 B2 C8 D1 G5 J9 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AH6 | A4 B2 B3 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6AJ4 | A7 B8 C2 D1 D3 D4 D6 D9 G5 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6AJ5 | A3 B4 C2 C7 D1 E6 G5 J1 K8 L2 M5 M10 N2 N9 | |
| 6AJ8/ECH81 Triode Unit | A4 B1 B2 B5 B6 B7 C3 D9 G8 I8 I10 J1 K7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6AJ8/ECH81 Heptode Unit | A4 B5 B7 B8 B9 C3 D2 E1 G6 I6 I9 J4 K3 L1 M5 M10 N2 N9 | |
| 6AK4 | A3 B6 C5 D1 G8 I6 I10 J7 K2 L1 M5 M10 N2 N9 | |
| 6AK5 | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6AK6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J8 K5 L1 M5 M10 N2 N9 | |
| 6AK8/EABC80 | Use 6T8 Cards. | |
| 6AL5 | A3 B4 C1 C5 F2 G7 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6AM4 | A7 B8 C2 D1 D3 D4 D6 D9 G5 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6AM5/EL91 | A3 B4 C2 D1 E7 G5 I6 I10 J7 K2 L1 M5 M10 N2 N9 | |
| 6AM6/EF91 | A3 B4 C2 C6 D1 E7 G5 I7 I10 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6AM8, A Diode Unit | A4 B5 C7 G8 I6 I10 K7 L4 L6 L10 M5 M10 N2 N9 | |
| 6AM8, A Pentode Unit | A4 B5 C1 C9 D2 E3 G6 I8 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6AN4 | A3 B4 C5 D2 G1 G7 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6AN5 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J8 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6AN6 Diode Unit | A7 B1 C6 F2 G3 K7 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6AN6 Triode Unit | A7 B1 C6 F4 G5 K7 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6AN8 Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6AN8 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J6 K3 L1 M5 M10 N2 N9 | |
| 6AQ4/EC91 | A3 B4 C2 D1 G7 I7 I9 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6AQ5, A | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6AQ6 Diode Unit | A3 B4 C2 F6 G5 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6AQ6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6AQ7GT Diode Unit | A7 B8 C2 F1 G3 I6 I10 K10 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 1. |
| 6AQ7GT Triode Unit | A7 B8 C6 D4 G5 I6 I10 J2 K8 L1 M5 M10 N2 N9 | |
| 6AQ8 (ECC85) | A4 B5 C3 C8 D2 D7 F1 G6 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6AR5 | A3 B4 C2 D1 E6 G5 I6 I10 J9 K5 L1 M5 M10 N2 N9 | |
| 6AR6 | A6 B8 C1 D7 E5 G3 I8 I9 J9 K7 L1 L6 L7 M4 M10 N2 N9 | |
| 6AR8 | A4 B5 C7 G1 G2 G3 G6 G8 G9 K2 L3 M5 M10 N2 N9 | Emission and short test only. Reject if below 4. |
| 6AS5 | A3 B4 C1 D2 E6 G7 I9 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| *6AS6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J4 K1 L1 M5 M10 N2 N9 | |
| 6AS6 Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 J2 K9 K10 L1 M5 M10 N2 N9 | |
| 6AS7G | A7 B8 C3 C6 D1 D4 F2 G5 J1 K1 L5 L6 L9 M3 M10 N2 N9 | Test P1 and P2. |
| 6AS8 Diode Unit | A4 B5 C8 G6 I6 I10 K3 L3 L6 L7 M5 M10 N2 N9 | Reject if below 4. |
| 6AS8 Pentode Unit | A4 B5 C3 C7 D2 E1 G9 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6AT6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6AT6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6AT8, A Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AT8, A Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |

** Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6AU4GT, GTA | A7 B8 C3 G5 I6 I10 K4 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4. |
| 6AU5GT | A2 B7 C3 D1 E8 G5 I6 I9 J10 K6 L1 L6 L7 M4 M10 N2 N9 | |
| 6AU6 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AU8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K8 L1 L6 L8 M5 M10 N2 N9 | |
| 6AU8 Triode Unit | A4 B5 C1 D2 G3 I8 I9 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AV5GA, GT | A2 B7 C3 D1 E8 G5 I7 I9 J10 K6 L1 L6 L7 M4 M10 N2 N9 | |
| 6AV6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6AV6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6AW8, A Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I7 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6AW8, A Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K10 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6AX4GT | A7 B8 C3 G5 I6 I10 K1 L4 L6 L9 M4 M10 N2 N9 | Reject if below 3. |
| 6AX5GT | A2 B7 C8 F3 G5 I6 I10 K6 L5 L6 L10 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6AX8 Pentode Unit | A4 B5 C7 D2 E3 G6 I8 I10 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6AX8 Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6AZ8 Pentode Unit | A4 B5 C3 D6 E2 G1 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6AZ8 Triode Unit | A4 B5 C7 D9 G8 I6 I10 J6 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6B4G | A2 B7 D5 G3 J10 K4 L1 L6 L8 M3 M10 N1 N9 | |
| 6B6G Diode Unit | A2 B1 B7 C8 F4 G5 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 6B6G Triode Unit | A2 B1 B7 C8 D10 G3 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6B7/6B7S Diode Unit | A1 B7 C6 F4 G5 I6 I10 K10 L3 M5 M10 N2 N9 | Use WG-337A-7 Adapter Test P1 and P2. Reject if below 2. |
| 6B7/6B7S Pentode Unit | A1 B7 C6 D10 E3 G2 I6 I10 J5 K8 L1 M5 M10 N2 N9 | Use WG-337A-7 Adapter. |
| 6B8, G Diode Unit | A2 B1 B7 C8 F4 G5 I6 I10 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 6B8, G Pentode Unit | A2 B1 B7 C8 D10 E6 G3 I6 I10 J5 K8 L1 M5 M10 N2 N9 | |
| 6BA5 | A3 B6 C8 D1 E7 G5 J1 K4 L1 M5 M10 N2 N9 | |
| 6BA6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BA7 | A4 B5 C3 D2 G1 G6 G7 G9 I6 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6BA8A Triode Unit | A4 B5 C1 D2 G3 I6 I10 J7 K4 L1 M5 M10 N2 N9 | |
| 6BA8A Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I7 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6BC4 | A4 B5 C6 D2 G1 I8 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6BC5 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BC7 | A4 B5 C1 C7 C9 F6 G8 H2 I6 I10 K6 L3 L6 L8 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 4. |
| 6BC8 | A4 B5 C3 C8 C9 D2 D7 F1 G6 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 6BD5GT | A2 B7 C3 D1 E8 G5 I6 I10 J8 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 6BD6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K3 L1 M5 M10 N2 N9 | |
| 6BE6 | A3 B4 C2 C7 D1 G5 G6 I6 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6BE7/EQ80 | A4 B5 C3 C8 C9 D2 D7 E1 G6 J2 K9 L1 M5 M10 N2 N9 | |
| 6BE8/FCF80 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6BE8/FCF80 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6BF5 | A3 B4 C2 D1 E6 G5 I6 I10 J9 K2 L1 L6 L7 M4 M10 N2 N9 | |
| 6BF6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6BF6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J7 K8 L1 M5 M10 N2 N9 | |
| 6BF7 | A3 B6 C4 C5 D2 D7 F1 G8 I7 I9 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6BG6G | A2 B7 C3 D5 E8 G10 I6 I10 J9 K10 L1 L6 L8 M5 M10 N2 N9 | |
| 6BG7 | A3 B6 C4 C5 D2 D7 F1 G8 I8 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6BH6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6BH8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6BH8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J7 K3 L1 M5 M10 N2 N9 | |
| 6BJ6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6BJ7 | A4 B3 B5 C1 C7 C9 F6 G8 H2 I6 I10 K7 K8 L3 L6 L8 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 4. |
| 6BJ8 Diode Unit | A4 B5 C2 C3 F1 G6 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6BJ8 Triode Unit | A4 B5 C9 D8 G7 I6 I10 J7 K5 L1 M5 M10 N2 N9 | |
| 6BK4 | A2 B7 C1 G5 G10 K9 L3 M5 M10 N2 N9 | Emission Test only. Reject if below 4. |
| 6BK5 | A4 B5 C6 D3 E8 G1 I6 I10 J5 K3 L1 L6 L7 M4 M10 N2 N9 | |
| 6BK7A | A4 B5 C3 C8 C9 D2 D7 F1 G6 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 6BL4 | A7 B8 C3 G5 I6 I10 K2 L4 L6 L10 M3 M10 N2 N9 | Reject if below 4. |
| 6BL7GT | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J7 K6 L1 L6 L7 M4 M10 N2 N9 | Test P1 and P2. |
| 6BM8 (ECL82) Triode Unit | A4 B5 C8 D1 G9 J2 K7 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6BM8 (ECL82) Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I7 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6BN4 | A3 B4 C1 C6 D2 G5 I7 I8 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6BN5 (EL85) | A4 B5 C3 C6 D1 E9 G7 J1 K2 L1 M5 M10 N2 N9 | |
| 6BN6 | A3 B4 C1 D2 G5 G6 G7 J1 K8 L5 L6 L7 M5 M10 N2 N9 | |
| 6BN8 Diode Unit | A4 B5 C2 C3 F1 G6 I6 I10 K4 L3 I6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6BN8 Triode Unit | A4 B5 C9 D8 G7 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6BQ5/EL84 | A4 B5 C3 D2 E9 G7 I6 I10 J6 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6BQ6GT, GTB/6CU6 | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| 6BQ7A | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 6BR5/EM80 | A4 B5 C2 D1 E3 E8 E9 G7 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Amp. Sec. Test on P1 Position. Shadow Min.—P1 Position. Shadow Max.—P2 or P3 Position. |
| 6BR8A Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6BR8A Triode Unit | A4 B5 C3 D1 G2 I6 I9 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6BS8 | A4 B5 C3 C8 D2 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 6BT4/EZ40 | A1 B8 C7 F2 G6 I6 I10 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. Use Special Adapter. |
| 6BT8 Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6BT8 Diode Unit | A4 B5 C3 F1 G2 K9 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6BU8 | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K7 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6BV8 Diode Unit | A4 B5 C7 C8 F9 G6 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6BV8 Triode Unit | A4 B5 C1 D2 G3 J3 K1 L1 M5 M10 N2 N9 | |
| 6BW4 | A4 B5 C9 F1 G7 I6 I10 K5 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6BW8 Pentode Unit | A4 B5 C7 D6 E8 G9 I7 I10 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BW8 Diode Unit | A4 B5 C2 F1 G3 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6BX4 | A3 B4 C7 F1 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6BX6/EF80 | A4 B5 C1 C3 C6 C9 D2 E8 G7 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6BX7GT | A7 B8 C3 C6 D1 D4 F2 G5 J5 K5 L1 L6 L7 M4 M10 N2 N9 | Test P1 and P2. |
| 6BY5GA | A2 B7 C1 C8 F4 G5 I6 I10 K3 L4 L6 L9 M4 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6BY6 | A3 B4 C2 D1 D7 E6 G5 I6 I10 J5 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6BY7 (EF85) | A4 B5 C1 C3 D2 E8 G7 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BY8 Diode Unit | A4 B5 C3 G6 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Reject if below 4. |
| 6BY8 Pentode Unit | A4 B5 C2 C9 D1 E8 G7 I7 I9 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6BZ6 | A3 B4 C2 C7 D1 E6 G5 I6 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6BZ7 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 6BZ8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I9 J1 K2 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 6C4 | A3 B4 C7 D6 G1 I6 I10 J1 K1 L1 M5 M10 N2 N9 | |
| 6C5, GT | A7 B1 B2 C8 D5 G3 I6 I10 J6 K6 L1 M5 M10 N2 N9 | |
| 6C6 | A1 B6 C4 C5 D10 E3 G2 I6 I10 J6 K8 L1 M5 M10 N2 N9 | |
| 6C8G | A2 B7 C4 C8 D5 D10 F3 G6 I6 I10 J4 K7 K8 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6CA4 (EZ81) | A4 B5 C3 F7 G1 I6 I10 K7 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6CA5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J5 K1 L1 L6 L7 M3 M10 N1 N9 | |
| 6CA7/EL34 | A2 B1 B7 C8 D5 E4 G3 I6 I10 J8 K7 L1 L6 L8 M4 M10 N2 N9 | |
| 6CB5, A | A2 B7 C3 D4 E1 G10 I8 I9 J10 K3 L1 L6 L7 M3 M10 N2 N9 | |
| 6CB6, A | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CD6G, GA | A2 B7 C3 D5 E8 G10 I6 I7 J10 K5 L1 L6 L7 M3 M10 N2 N9 | |
| 6CD7/EM34 | A2 B7 C8 D4 E5 F6 G3 J3 K10 L1 M5 M10 N2 N9 | P1—meas. Gm—one eye open, one closed. P2—other eye open—second closed. P3—both eyes open. Depress Special Leakage/Gas Button in gas test. |
| 6CE5 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CF6 | A3 B4 C2 C7 D1 E6 G5 I6 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CF8/EF86/ 6267 | A4 B5 C3 C8 D9 E1 G6 I6 I10 J3 K5 L1 M5 M10 N2 N9 | |
| *6CG7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J3 K1 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6CG8A Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I7 I8 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6CG8A Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6CH6/EL822 | A4 B5 C3 C9 D2 E8 G7 I6 I10 J4 K6 L1 L6 L8 M3 M10 N1 N9 | |
| 6CH8 Pentode Unit | A4 B5 C6 D7 E3 G2 I7 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CH8 Triode Unit | A4 B5 C1 D8 G9 I6 I10 J6 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6CJ5/EF41 | A1 B8 C3 C7 D6 E5 G2 I6 I10 J4 K2 L1 M5 M10 N2 N9 | Use Special Adapter. |

*Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6CJ6/EL81 | A4 B5 C3 C9 D2 E8 G10 I6 I10 J10 K2 L1 L6 L7 M3 M10 N1 N9 | |
| 6CK4 | A2 B7 C8 D1 G5 I6 I10 J10 K6 K7 L1 L6 L7 M4 M10 N2 N9 | |
| 6CK5/EL41 | A1 B8 C3 C7 D6 E5 G2 I6 I10 J6 K8 L1 L6 L8 M3 M10 N1 N9 | Use Special Adapter. |
| 6CK6/EL83 | A4 B5 B8 C3 C6 D2 E1 G7 I6 I10 J2 K6 L1 L6 L8 M3 M10 N1 N9 | |
| 6CL5 | A2 B7 C3 D4 E8 G10 I6 I7 J1 K5 L1 L6 L7 M4 M10 N2 N9 | |
| 6CL6 | A4 B5 C1 C7 D2 E3 G6 I6 I10 J4 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6CL8A Tetrode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6CL8A Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6CM5/EL36 | A2 B7 C8 D5 E4 G10 I6 I10 J10 K7 L1 L6 L8 M4 M10 N2 N9 | |
| 6CM6 | A4 B5 C7 D3 E1 G9 I6 I10 J8 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6CM7 Triode Unit 1 | A4 B5 C3 D7 G6 I6 I10 J6 K5 L1 M5 M10 N2 N9 | |
| 6CM7 Triode Unit 2 | A4 B5 C9 D8 G1 I6 I10 J6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6CM8 Pentode Unit | A4 B5 C3 C8 D2 E7 G6 I6 I7 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CM8 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J2 K7 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6CN6 | Use EL38 Data. | |
| 6CN7 Diode Unit | A4 B5 C3 F1 G2 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6CN7 Triode Unit | A4 B5 C6 D7 G8 I6 I10 J2 K7 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6CQ4 | A7 B8 C3 G5 I6 I10 K4 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4. |
| 6CQ6/EF92 | A3 B4 C2 C6 D1 E7 G5 I6 I10 J3 K4 L1 M5 M10 N2 N9 | |
| *6CQ8 Tetrode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| *6CQ8 Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6CR6 Diode Unit | A3 B4 C1 G2 K10 L3 M5 M10 N2 N9 | Reject if below 3. |
| 6CR6 Pentode Unit | A3 B4 C1 D7 E6 G5 I6 I10 J4 K4 L1 M5 M10 N2 N9 | |
| 6CR8 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K10 L1 L6 L8 M3 M10 N1 N9 | |
| 6CR8 Pentode Unit | A4 B5 C3 D2 E7 G6 I7 I10 J1 K3 L1 L6 L7 M3 M10 N1 N9 | |
| *6CS6 | A3 B4 B7 C2 D1 G5 G6 I6 I10 J7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| *6CS6 Grid 1 Test | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K8 L1 M5 M10 N2 N9 | Reject if below 4. |
| 6CS6 Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 I6 I7 J1 K10 L1 M5 M10 N2 N9 | Reject if below 4. |
| 6CS7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J6 K6 L1 M5 M10 N2 N9 | |
| 6CS7 Triode Unit 2 | A4 B5 C9 D3 G1 I6 I10 J7 K1 L1 M5 M10 N2 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6CT7/EAF42 Diode Unit | A1 B8 C7 G3 K9 L3 M5 M10 N2 N9 | Use Special Adapter. Reject if below 3. |
| 6CT7/EAF42 Pentode Unit | A1 B8 C7 D6 E5 G2 I6 I10 J3 K3 L1 M5 M10 N2 N9 | Use Special Adapter. |
| 6CU5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K2 L1 L6 L7 M4 M10 N2 N9 | |
| 6CU6, 6BQ6GT, GTB | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| *6CU8 Pentode Unit | A4 B5 C1 C6 D7 E3 G2 I7 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CU8 Triode Unit | A4 B5 C1 D8 G9 I6 I10 J6 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6CV7/EBC41 Diode Unit | A1 B8 C7 F6 G5 K2 K3 L4 M5 M10 N2 N9 | Use Special Adapter. Test P1 and P2. Reject if below 4. |
| 6CV7/EBC41 Triode Unit | A1 B8 C7 D3 G2 J2 K8 L1 M5 M10 N2 N9 | Use Special Adapter. Depress Special Leakage/Gas Button in gas test. |
| 6CW4 | A3 B1 B5 C2 D6 G4 I6 I8 J1 K1 K2 L1 L6 L7 M5 M10 N2 N9 | Use Nuvistor Adapter WG-340A. |
| 6CW5 (EL86) | A4 B5 C3 D2 E9 G7 I6 I10 J9 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6CW7/ECC84 | A4 B5 C1 C7 C8 D2 D6 F3 G9 I6 I10 J3 K2 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6CX8 Triode Unit | A4 B5 B6 B7 B8 B9 C1 D2 G3 I6 I7 J1 K6 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 6CX8 Pentode Unit | A4 B1 B2 B3 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6CY5 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6CY7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K7 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6CY7 Triode Unit 2 | A4 B5 C9 D3 G1 J9 K6 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6CZ5 | A4 B5 C7 D3 E1 G9 I9 I10 J1 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6D6 | A1 B6 C4 C5 D10 E3 G2 I6 I10 J6 K7 L1 M5 M10 N2 N9 | |
| 6D7 | A1 B7 C4 C6 D10 E3 G2 I6 I10 J6 K8 L1 M5 M10 N2 N9 | Use WG-337A-7 Adapter. |
| 6D8G | A2 B7 C8 D5 G3 G4 G6 G10 I6 I10 J7 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6DA4 | A7 B8 C3 G5 I6 I10 K4 L4 L6 L10 M4 M10 N1 N9 | Reject if below 3. |
| 6DA5/EM81 | A4 B5 C2 D1 E9 G7 J4 K9 K10 L1 M5 M10 N2 N9 | P1—Test Gm—eye closed. P2 and P3, eye open. |
| 6DA6/EF89 | A4 B5 B9 C3 D2 E8 G7 I6 I10 J4 K6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6DB5 | A4 B5 C2 D3 E1 G9 I6 I7 J1 K8 L1 L6 L8 M3 M10 N1 N9 | |
| 6DB6 | A3 B4 C2 D1 D7 E6 G5 I6 I10 J3 K2 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6DC6 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |

*Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| **6DC8/EBF89 Diode Unit** | A4 B5 C3 F7 G8 I6 I10 K2 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| **6DC8/EBF89 Pentode Unit** | A4 B5 B9 C3 D2 E1 G6 I6 I10 J4 K6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| **6DE4** | A7 B8 C3 G5 I6 I10 K7 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4. |
| **6DE6** | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| **6DE7 Triode Unit 1** | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M4 M10 N2 N9 | |
| **6DE7 Triode Unit 2** | A4 B5 C9 D2 G1 I6 I10 J10 K9 L1 L6 L8 M4 M10 N2 N9 | |
| **6DG6GT** | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M4 M10 N2 N9 | |
| ***6DJ8 (ECC88)** | A4 B5 C3 C8 D2 D7 F1 G6 I9 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| **6DK6** | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K7 L1 L6 L8 M4 M10 N2 N9 | |
| **6DL5/EL95** | A3 B4 C2 D1 E6 G5 I6 I10 J6 K5 K6 L1 L6 L7 M5 M10 N2 N9 | |
| **6DN6** | A7 B1 B2 C3 D5 E8 G10 I8 I10 J10 K3 L1 L6 L7 M3 M10 N2 N9 | |
| **6DN7 Triode Unit 1** | A8 B7 C6 D4 G5 I6 I10 J6 K5 L1 M3 M10 N1 N9 | |
| **6DN7 Triode Unit 2** | A8 B7 C3 D1 G2 I6 I10 J8 K7 L1 L6 L7 M3 M10 N1 N9 | |
| **6DQ5** | A2 B7 C3 D1 E4 G10 I6 I8 J10 K4 L1 L6 L7 M4 M10 N2 N9 | |
| **6DQ6A** | A7 B2 C8 D5 E4 G10 I7 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| **6DR7 Triode Unit 1** | A4 B5 C8 D7 G6 J1 K6 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6DR7 Triode Unit 2** | A4 B5 C9 D2 G1 J7 K6 L1 L6 L7 M5 M10 N2 N9 | |
| **6DR8/EBF83 Diode Unit** | A4 B5 C3 F7 G8 I6 I10 K2 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| **6DR8/EBF83 Pentode Unit** | A4 B5 B9 C3 D2 E1 G6 J1 K10 L2 M5 M10 N2 N9 | Reject if below 2.5. Depress Special Leakage/Gas Button in gas test. |
| **6DS5** | A3 B4 C2 D1 E6 G5 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| **6DS8/ECH83 Triode Unit** | A4 B5 C3 D9 G8 J1 K8 L2 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6DS8/ECH83 Heptode Unit** | A4 B5 C3 D2 D7 E1 G6 J1 K8 K9 L2 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6DT5** | A4 B5 C7 D3 E1 G9 I6 I10 J9 K6 L1 L6 L7 M4 M10 N2 N9 | |
| **6DT6** | A3 B4 C2 D1 D7 E6 G5 I6 I10 J4 K7 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6DT8** | A4 B5 C3 C8 D2 D7 F1 G6 J1 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| **6DW5** | A4 B5 C7 D3 D6 E1 G9 I6 I10 J8 K1 L1 L6 L7 M4 M10 N2 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| **6DZ7** | A2 B7 C8 D1 D5 E4 F3 G6 I6 I10 J5 K1 L1 L6 L7 M3 M10 N1 N9 | Test P1 and P2. |
| **6DZ8 Triode Unit** | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M5 M10 N2 N9 | |
| **6DZ8 Pentode Unit** | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| **6E5** | A1 B6 C5 D3 E4 G2 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Triode Test—P1. Shadow Min.—P1. Shadow Max.—P2. |
| **6EA5** | A3 B4 C2 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| **6EA7 Triode Unit 1** | A7 B8 C6 D4 G5 J2 K10 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6EA7 Triode Unit 2** | A7 B8 C3 D1 G2 J8 K6 L1 L6 L7 M5 M10 N2 N9 | |
| **6EA8 Triode Unit** | A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| **6EA8 Pentode Unit** | A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | |
| **6EB5** | A3 B4 C1 C5 C6 F2 G7 I6 I10 K6 K7 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| **6EB8 Triode Unit** | A4 B5 C1 D2 G3 J1 K4 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6EB8 Pentode Unit** | A4 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| **6EF6** | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M5 M10 N2 N9 | |
| **6EH5** | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M5 M10 N2 N9 | |
| **6EH7** | A4 B5 C1 C6 D2 D9 E8 G7 I6 I10 J4 K4 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6EH8 Pentode Unit** | A4 B5 C1 C6 D7 E8 G9 I6 I10 J2 K4 L1 L6 L7 M3 M10 N1 N9 | |
| **6EH8 Triode Unit** | A4 B5 C1 C6 D2 G3 I6 I10 J2 K8 L1 L6 L8 M3 M10 N1 N9 | |
| **6EJ7** | A4 B5 C1 C6 C9 D2 E8 G7 I6 I10 J2 K4 L1 L6 L8 M5 M10 N2 N9 | |
| **6EM5** | A4 B5 C7 D3 D6 E1 G9 I6 I8 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| **6EM7 Triode Unit 1** | A7 B8 C6 D4 G5 I6 I10 J2 K6 K7 L1 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6EM7 Triode Unit 2** | A7 B8 C3 D1 G2 I6 I10 J10 K4 L1 L6 L7 M3 M10 N1 N9 | |
| **6EQ7 Pentode Unit** | A4 B1 B5 B9 C3 D2 E6 G7 J1 K5 L1 M5 M10 N2 N9 | |
| **6EQ7 Diode Unit** | A4 B5 B9 C3 G8 K3 L4 M5 M10 N2 N9 | Reject if below 3. |
| **6ER5** | A3 B4 C1 C6 C7 D2 G5 I6 I10 J2 K8 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6ES5** | A3 B4 B6 B7 D2 G5 J2 K3 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| **6ES8 (ECC89)** | A4 B5 C3 C8 D2 D7 F1 G6 I6 I8 J1 K2 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |

** Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6ET6/EF98 | A3 B4 B7 C2 D1 F6 G5 J1 K7 K8 L2 M5 M10 N2 N9 | |
| 6EU7 | A1 B2 C4 C9 D5 D8 F6 G7 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6EU8 Triode Unit | A4 B5 C6 D2 G3 I8 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| *6EU8 Pentode Unit | A4 B5 C8 D7 E9 G1 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6EV5 | A3 B4 C2 C7 D1 E6 G5 I8 I9 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6EV7 | A4 B5 C3 C8 D2 D7 F1 G6 I7 I10 J1 K6 K7 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6EW6 | A3 B4 B7 C2 D1 E6 G5 I7 I9 J1 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6EX6 | A2 B7 C3 D5 E8 G10 I6 I7 J1 K2 L1 L6 L7 M3 M10 N1 N9 | |
| 6EY6 | A2 B7 C8 D5 E4 G3 I6 I10 J7 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6EZ5 | A2 B7 C8 D5 E4 G3 I6 I10 J7 K5 L1 L6 L7 M3 M10 N1 N9 | |
| 6EZ8 | A5 B4 C1 D2 D7 D9 F6 G3 H8 I6 I10 J2 K6 K7 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6F5, GT | A7 B1 B2 C8 D10 G4 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6F6, G, GT | A2 B1 B7 C8 D5 E4 G3 I6 I10 J9 K5 M3 M10 N1 N9 | |
| 6F7 Triode Unit | A1 B7 C6 D5 G4 I6 I10 J6 K10 L1 M5 M10 N2 N9 | Reject if below 2. |
| 6F7 Pentode Unit | A1 B7 C6 D10 E3 G2 I7 I10 J6 K9 L1 M5 M10 N2 N9 | |
| 6F8G | A2 B7 C4 C8 D5 D10 F3 G6 I6 I10 J1 K1 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6FA7 Diode Unit | A4 B5 C6 G3 K10 L3 M5 M10 N2 N9 | Reject if below 1. |
| 6FA7 Tetrode Unit | A4 B5 C6 D7 E8 F1 G9 J1 K7 K8 L1 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. Depress Special Leakage/Gas Button in gas test. |
| 6FD7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K6 K7 L1 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6FD7 Triode Unit 2 | A4 B5 C9 D2 D3 G1 I6 I10 J10 K4 L1 L6 L7 M3 M10 N1 N9 | |
| 6FE5 | A2 B7 C8 D5 E4 G3 I6 I8 J1 K3 L1 L6 L7 M4 M10 N2 N9 | |
| 6FG5 | A3 B4 C2 D1 E4 G5 I6 I10 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6FG6/EM84 | A4 B5 C3 D1 E6 E7 G9 J2 K10 L1 M5 M10 N2 N9 | Reject if below 1. Bands full closed. |
| 6FG7 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K4 L1 L6 L7 M3 M10 N1 N9 | |
| 6FG7 Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K8 L1 L6 L8 M3 M10 N1 N9 | |
| 6FH5 | A3 B4 B6 C1 C7 D2 G5 I8 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6FH6 | A7 B2 C8 D5 E4 G10 I7 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| 6FH8 Triode Unit | A5 B4 D2 G3 J2 K4 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6FH8 Tetrode Unit | A5 B1 B4 B8 D6 E7 G9 J3 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1. |
| 6FH8 Tetrode Unit | A5 B4 D6 E7 F8 H1 J2 K1 L1 M5 M10 N2 N9 | Test P2 and P3. Reject if below 3.5. |
| 6FM8 Diode Unit | A4 B5 C1 C3 F2 G6 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6FM8 Triode Unit | A4 B5 C7 D8 G9 J3 K9 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6FV6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6FV8 Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6FV8 Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6FW5 | A2 B7 C3 D1 E8 G5 I7 I9 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| 6FW8 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I7 J1 K10 L1 L6 L9 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 6FY5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K10 L1 L6 L9 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6FY8 Triode Unit | A4 B5 C8 D1 G9 J2 K5 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6FY8 Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6G6G, GT | A2 B7 C8 D5 E4 G3 I6 I10 J6 K3 L1 M5 M10 N2 N9 | |
| 6GC6 | A2 B7 C3 D5 E4 E8 G10 I7 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | |
| 6GE8 Triode Unit | A4 B5 C2 D3 G6 I7 I9 J10 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 6GE8 Pentode Unit | A4 B5 C7 D8 E1 G9 I6 I10 J3 K7 L1 L6 L7 M3 M10 N1 N9 | |
| *6GH8 Triode Unit | A4 B5 C7 C8 D9 G1 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | |
| *6GH8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6GJ8 | Use 6GH8 Data. | |
| 6GK6 | A4 B3 B5 B9 C1 D2 E8 G7 I6 I10 J5 K6 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6GM6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K6 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6GM8/ECC86 | A4 B5 C3 C8 C9 D2 D7 F1 G6 I6 I10 J2 K3 L2 M5 M10 N2 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6GN8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K3 L1 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6GN8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6GW6 | A2 B7 C8 D5 E4 G10 I7 I10 J10 K4 L1 L6 L7 M4 M10 N2 N9 | |
| 6H6, GT | A2 B1 B7 C4 C8 F3 G5 K9 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6J4 | A3 B4 C2 D1 G7 I7 I9 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |

*Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6J5, GT | A2 B1 B7 C8 D5 G3 I6 I10 J3 K1 L1 M5 M10 N2 N9 | |
| 6J6 | A3 B4 C7 D5 D6 F1 G2 I7 I9 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6J7, G, GT | A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J6 K8 L1 M5 M10 N2 N9 | |
| 6K4/EC70 | A3 B6 C7 D1 G2 G4 G8 J1 K6 K7 L1 L6 L7 M5 M10 N2 N9 | Use WG-339A Adapter. |
| 6K5G | A2 B1 B7 C8 D10 G3 I6 I10 J2 K5 K6 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6K6G | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 M5 M10 N2 N9 | |
| 6K7, G, GT | A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J2 K6 L1 M5 M10 N2 N9 | |
| 6K8, G, GT Hexode Unit | A1 A2 B7 B10 C8 D5 G3 G4 I6 I7 J1 K5 L1 M5 M10 N2 N9 | |
| 6K8, G, GT Triode Unit | A7 B1 B2 C8 D5 G6 I6 I10 J1 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 6L6, G, GB | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6L7, G | A2 B1 B7 C8 D5 D10 E4 G3 I6 I10 J6 K6 L1 M5 M10 N2 N9 | |
| 6M3 | A2 B8 C10 G3 I6 I10 K1 L4 L6 L10 M3 M10 N1 N9 | Reject if below 4. |
| 6N7, GT | A2 B1 B7 C8 D4 D5 F3 G6 I6 I10 J4 K8 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6N8/EBF80 Diode Unit | A4 B5 C3 F7 G8 I6 I10 K1 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6N8/EBF80 Pentode Unit | A4 B5 B9 C3 D2 E1 G6 I6 I10 J6 K3 K4 L1 M5 M10 N2 N9 | |
| 6P5G, GT | A2 B7 C8 D5 G3 I6 I10 J6 K6 L1 M5 M10 N2 N9 | |
| 6Q4 (EC80) | A4 B5 C3 D1 G9 I7 I10 J1 K10 L1 L6 L9 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6Q7, G, GT Diode Unit | A2 B1 B7 C8 F4 G5 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6Q7, G, GT Triode Unit | A2 B1 B7 C8 D10 G3 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6R3/EY81 | A4 B5 C10 G2 G9 I6 I10 K6 L4 L6 L10 M3 M10 N1 N9 | Reject if below 4. |
| 6R4/EC81 | A4 B5 C3 D1 G8 I6 I10 J4 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6R7, GT Triode Unit | A2 B7 C8 D10 G3 I6 I10 J7 K7 K8 L1 M5 M10 N2 N9 | |
| 6R7, GT Diode Unit | A2 B7 C8 F4 G5 I6 I10 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 6R8 Triode Unit | A4 B5 C7 D8 G9 I6 I10 J3 K5 L1 M5 M10 N2 N9 | |
| 6R8 Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 3. |
| 6S2 | A5 B4 G10 K7 K8 L5 L6 L7 M5 M10 N2 N9 | Reject if below 3. |
| 6S4, A | A4 B5 C2 D3 G9 I6 I10 J6 K1 L1 M5 M10 N2 N9 | |
| 6S7 | A2 B7 C5 C8 D10 E4 G3 I6 I10 J6 K6 L1 M5 M10 N2 N9 | |
| 6S8GT Diode Unit | A7 B8 C2 C5 F4 G3 H1 K10 L3 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 3. |
| 6S8GT Triode Unit | A7 B8 C2 D10 G6 J2 K10 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6SA7, GT | A2 B1 B7 C6 C8 D5 G3 G4 I6 I10 J6 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6SB7Y | A2 B1 B7 C6 C8 D5 G3 G4 I6 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6SC7 | A7 B1 B8 C6 D3 D4 F2 G5 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6SD7GT | A2 B1 B3 B7 C5 D4 E6 G8 I6 I10 J4 K6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6SF5, GT | A7 B1 B8 C2 D3 G5 I7 I9 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6SF7 Diode Unit | A7 B1 B8 C3 G5 K10 L3 M5 M10 N2 N9 | Reject if below 2. |
| 6SF7 Pentode Unit | A7 B1 B8 C3 D2 E4 G6 I6 I10 J2 K4 L1 M5 M10 N2 N9 | |
| 6SG7 | A2 B1 B7 C3 D4 E6 G8 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6SH7 | A2 B1 B7 C3 D4 E6 G8 I6 I10 J2 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6SJ7, GT | A2 B1 B7 C3 C5 D4 E6 G8 I7 I10 J6 K7 L1 M5 M10 N2 N9 | Reject if below 4. |
| 6SK7, GT | A2 B1 B7 C3 C5 D4 E6 G8 I6 I10 J4 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6SL7GT | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Test P1 and P2. |
| *6SN7GT, GTA, GTB | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6SQ7, GT Diode Unit | A7 B1 B8 C3 F4 G5 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 6SQ7, GT Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6SR7 Diode Unit | A7 B1 B8 C3 F4 G5 K8 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6SR7 Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J7 K8 L1 M5 M10 N2 N9 | |
| 6SS7 | A2 B1 B7 C3 C5 D4 E6 G8 I6 I10 J2 K4 L1 M5 M10 N2 N9 | |
| 6ST7 Diode Unit | A7 B8 C3 F4 G5 K8 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6ST7 Triode Unit | A7 B8 C3 D2 G6 I6 I10 J7 K8 L1 M5 M10 N2 N9 | |
| 6SU7, GTY | Use 6SL7GT Card. | |
| 6SV7 Pentode Unit | A7 B8 C3 D2 E4 G6 I6 I10 J2 K3 L4 M5 M10 N2 N9 | |
| 6SV7 Diode Unit | A7 B8 C3 G5 I6 I10 K7 L3 L6 L7 M5 M10 N2 N9 | Reject if below 4. |
| 6T4 | A3 B4 C5 D2 G1 I8 I9 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6T7G Diode Unit | A2 B7 C8 F4 G5 I6 I10 K6 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |

** Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6T7G Triode Unit | A2 B7 C8 D10 G3 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6T8 Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 3. |
| 6T8 Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6U3/EY80 | A4 B5 C3 G9 I6 I10 K4 K5 L4 L6 L10 M3 M10 N1 N9 | Reject if below 4. |
| 6U4GT | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M3 M10 N1 N9 | Reject if below 3. |
| 6U5 | A1 B6 C5 D3 E4 G2 I6 I10 J3 K10 L1 M5 M10 N2 N9 | Triode Test—P1. Shadow Min.—P1. Shadow Max.—P2. |
| 6U6GT | A2 B7 C8 D5 E4 G3 I6 I10 J10 K5 L1 L6 L7 M3 M10 N1 N9 | |
| 6U7G | A7 B2 C5 C8 D10 E4 G3 I6 I10 J6 K10 L6 L7 L1 M5 M10 N2 N9 | |
| 6U8, A Pentode Unit | A4 B5 C7 D2 E3 G6 I7 I10 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6U8, A Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6V3A | A4 B5 C10 G2 K8 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4. |
| 6V4/EZ80 | A4 B5 C3 F7 G1 I6 I10 K5 L4 L6 L9 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| *6V6, GT | A2 B7 C8 D5 E4 G3 I6 I7 J1 K1 L1 M5 M10 N2 N9 | |
| 6V8 Triode Unit | A4 B5 C3 D6 G1 I7 I10 J1 K7 L1 M5 M10 N2 N9 | |
| 6V8 Dual Diode | A4 B5 C3 C8 F2 G7 I6 I10 K1 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6V8 Diode Unit | A5 B4 C3 G9 I6 I10 K2 L4 M5 M10 N2 N9 | Reject if below 2. |
| 6W4GT | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M5 M10 N2 N9 | Reject if below 3. |
| 6W6, GT | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M3 M10 N1 N9 | |
| 6W7G | A2 B5 B7 C8 D10 E4 G3 I6 I10 J6 K7 L1 M5 M10 N2 N9 | |
| 6X2/EY51 | A1 B7 G10 K1 L5 M5 M10 N2 N9 | Reject if below 3. Use GW-338A Adapter. Connect base leads to Pins 1 and 7. Connect top lead to "Plate" Connector. |
| 6X4 | A3 B4 C7 F1 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6X5, GT | A7 B1 B2 C8 F3 G5 K5 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6X8 Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6X8 Triode Unit | A4 B5 C6 D2 G3 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6Y6G | A2 B7 C8 D5 E4 G3 I6 I10 J10 K3 L1 L6 L7 M3 M10 N1 N9 | |
| 6Y7G | A2 B7 C8 D4 D5 F3 G6 I6 I10 J2 K8 L1 M3 M1 N1 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6Z7G | A2 B7 C8 D4 D5 F3 G6 I6 I10 J2 K8 L1 M3 M10 N1 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 7A4 | A1 B8 C7 D6 G2 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 7A5 | A1 B8 C7 D6 E3 G2 I6 I10 J9 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 7A6 | A1 B5 B8 C2 C7 F3 G6 I6 I10 K8 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 7A7 | A1 B5 B8 C4 C7 D6 E3 G2 I6 I10 J2 K2 L1 M5 M10 N2 N9 | |
| 7A8 | A1 B8 C7 D4 E3 G2 G5 G6 I6 I10 J1 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 7AD7 | A1 B8 C4 C7 D6 E3 G2 I7 I10 J1 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 7AF7 | A1 B8 C2 C7 D4 D5 F3 G6 I6 I10 J1 K1 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 7AG7 | A1 B5 B8 C4 C7 D6 E3 G2 J1 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 7AH7 | A1 B8 C4 C7 D6 E3 G2 I8 I10 J1 K1 L1 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 7AK7 | A1 B5 B8 C4 C7 D6 E3 G2 J1 K8 L1 L6 L7 M3 M10 N1 N9 | |
| 7AN7/PCC84 | A4 B5 C1 C8 D2 D6 F3 G9 I6 I10 J3 K2 L1 L6 L7 M5 M10 N3 N9 | Test P1 and P2. |
| *7AU7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K9 L1 L6 L7 M2 M10 N2 N9 | Test P1 and P2. |
| 7B4 | A1 B8 C7 D6 G2 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 7B5 | A1 B8 C7 D6 E3 G2 I6 I10 J9 K6 L1 M5 M10 N2 N9 | |
| 7B6 Diode Unit | A1 B8 C7 F5 G6 I6 I10 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 7B6 Triode Unit | A1 B8 C7 D3 G2 I6 I10 J2 K9 L1 M5 M10 N2 N9 | |
| 7B7 | A1 B8 C4 C7 D6 E3 G2 I6 I10 J6 K5 L1 M5 M10 N2 N9 | |
| 7B8 | A1 B8 C7 D4 G2 G3 G5 G6 I6 I10 J7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 7C4 | A1 B8 C7 G4 K6 L3 M5 M10 N2 N9 | Reject if below 4. |
| 7C5 | A1 B8 C7 D6 E3 G2 I6 I10 J8 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 7C6 Diode Unit | A1 B8 C4 C7 F5 G6 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 7C6 Triode Unit | A1 B8 C4 C7 D3 G2 I6 I10 J1 K8 L1 M5 M10 N2 N9 | |
| 7C7 | A1 B8 C4 C7 D6 E3 G2 I6 I10 J6 K7 L1 M5 M10 N2 N9 | |
| 7DJ8 | A4 B5 C3 C8 D2 D7 F1 G6 I9 I10 J1 K1 L1 L6 L7 M4 M10 N2 N9 | Test P1 and P2. |
| 7E5 | A2 B8 C4 D1 G3 I6 I10 J3 K3 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 7E6 Diode Unit | A1 B8 C7 F6 G5 I6 I10 K10 L3 M3 M10 N1 N9 | Test P1 and P2. Reject if below 2. |

*Indicates corrected punch data. Discard any punch information published previously on this tube-type.

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 7E6 Triode Unit | A1 B8 C7 D3 G2 I6 I10 J6 K10 L1 L6 L7 M3 M10 N1 N9 | |
| 7E7 Diode Unit | A1 B8 C7 F4 G3 I6 I10 K10 L3 M3 M10 N1 N9 | Test P1 and P2. Reject if below 2. |
| 7E7 Pentode Unit | A1 B8 C7 D6 E5 G2 I6 I10 J2 K6 L1 M3 M10 N1 N9 | |
| 7ES8 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I8 J1 K2 L1 L6 L7 M3 M10 N2 N9 | |
| 7EY6 | A2 B7 C8 D5 E4 G3 I6 I10 J7 K9 L1 L6 L8 M3 M10 N1 N9 | |
| 7F7 | A1 B8 C2 C7 D4 D5 F3 G6 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 7F8 | A2 B7 C4 C5 D1 D8 F3 G6 J3 K5 L1 M5 M10 N2 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 7G7 | A1 B8 C7 D6 E3 G2 I6 I10 J2 K3 L1 L6 L7 M3 M10 N1 N9 | |
| 7H7 | A1 B5 B8 C4 C7 D6 E3 G2 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 7J7 Triode Unit | A1 B8 C7 D4 G3 I6 I10 J3 K7 L1 M3 M10 N1 N9 | |
| 7J7 Heptode Unit | A1 B8 C4 C7 D6 E5 G2 I6 I10 J3 K5 L1 M3 M10 N1 N9 | |
| 7K7 Triode Unit | A1 B8 C2 D4 G3 I9 I10 J1 K8 L1 M5 M10 N2 N9 | |
| 7K7 Diode Unit | A1 B8 C7 F5 G6 I6 I10 K3 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 7L7 | A1 B4 B5 B8 C7 D6 E3 G2 I6 I10 J2 K7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 7N7 | A1 B8 C2 C7 D4 D5 F3 G6 I6 I10 J3 K1 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 7Q7 | A1 B5 B6 B8 C7 D4 G2 G3 I6 I10 J2 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 7R7 Diode Unit | A1 B8 C7 F3 G4 I6 I10 K1 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 7R7 Pentode Unit | A1 B8 C7 D6 E5 G2 I6 I10 J2 K1 L1 M5 M10 N2 N9 | |
| 7S7 Triode Unit | A1 B8 C7 D4 G3 I6 I10 J3 K7 L1 M5 M10 N2 N9 | |
| 7S7 Heptode Unit | A1 B8 C4 C7 D6 E5 G2 I6 I10 J3 K1 L1 M5 M10 N2 N9 | |
| 7T7 | A1 B8 C4 C7 D6 E3 G2 I6 I10 J2 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 7V7 | A1 B5 B8 C4 C7 D6 E3 G2 I8 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 7W7 | A1 B8 C4 C5 C7 D6 E3 G2 I8 I10 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 7X6 | A1 B8 C2 C7 F6 G3 I6 I10 K7 L4 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4. |
| 7X7 Diode Unit | A1 B8 C4 C7 F6 G5 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 7X7 Triode Unit | A1 B8 C4 D3 G2 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 7Y4 | A1 B8 C7 F3 G6 K6 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 7Z4 | A1 B8 C7 F3 G6 K7 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4. |
| 8AU8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K8 L1 L6 L8 M5 M10 N3 N9 | |
| 8AU8 Triode Unit | A4 B5 C1 D2 G3 I8 I9 J1 K6 L1 L6 L7 M5 M10 N3 N9 | |
| 8AW8A Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I7 J1 K2 L1 L6 L7 M5 M10 N3 N9 | |
| 8AW8A Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K10 L1 L6 L8 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8BA8A Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I7 J1 K2 L1 L6 L7 M5 M10 N3 N9 | |
| 8BA8A Triode Unit | A4 B5 C1 D2 G3 I6 I10 J7 K4 L1 M5 M10 N3 N9 | |
| 8BH8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K3 L1 L6 L7 M5 M10 N3 N9 | |
| 8BH8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J7 K3 L1 M5 M10 N3 N9 | |
| 8BN8 Diode Unit | A4 B5 C2 C3 F1 G6 I6 I10 K4 L3 L6 L7 M5 M10 N3 N9 | Test P1 and P2. Reject if below 3. |
| 8BN8 Triode Unit | A4 B5 C9 D8 G7 I6 I10 J2 K7 L1 L6 L7 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8BQ5 | A4 B5 C3 D2 E9 G7 I6 I10 J6 K7 L1 L6 L8 M5 M10 N3 N9 | |
| 8BQ7A | A4 B5 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M5 M10 N3 N9 | Test P1 and P2. Special Leakage Test. |
| •8CG7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J3 K1 L1 M5 M10 N3 N9 | Test P1 and P2. |
| 8CM7 Triode Unit 1 | A4 B5 C3 D7 G6 I6 I10 J6 K5 L1 M5 M10 N3 N9 | |
| 8CM7 Triode Unit 2 | A4 B5 C9 D8 G1 I6 I10 J6 K7 L1 L6 L7 M5 M10 N3 N9 | |
| 8CN7 Diode Unit | A4 B5 C3 F2 G1 K7 L3 L6 L8 M5 M10 N3 N9 | Test P1 and P2. Reject if below 3. |
| 8CN7 Triode Unit | A4 B5 C6 D7 G8 I6 I10 J2 K7 L1 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8CS7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J6 K6 L1 M5 M10 N3 N9 | |
| 8CS7 Triode Unit 2 | A4 B5 C9 D3 G1 I6 I10 J7 K1 L1 M10 N3 N9 | |
| 8CW5 | A4 B5 C3 D2 E9 G7 I6 I10 J9 K6 L1 L6 L8 M5 M10 N3 N9 | |
| 8CX8 Triode Unit | A4 B5 B6 B7 B8 B9 C1 D2 G3 I6 I7 J1 K6 K7 L1 L6 L7 M5 M10 N3 N9 | |
| 8CX8 Pentode Unit | A4 B1 B2 B3 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M5 M10 N3 N9 | |
| 8CY7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K7 L1 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8CY7 Triode Unit 2 | A4 B5 C9 D3 G1 J9 K6 L1 L6 L7 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8EB8 Triode Unit | A4 B5 C1 D2 G3 J1 K4 L1 M3 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8EB8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M3 M10 N2 N9 | |
| 8EM5 | A4 B5 C7 D3 D6 E1 G9 I6 I8 J1 K6 L1 L6 L7 M5 M10 N3 N9 | |

*• Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 8GN8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K3 L1 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8GN8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K7 L1 L6 L8 M5 M10 N3 N9 | |
| •8SN7 | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M5 M10 N3 N9 | Test P1 and P2. |
| 8SN7GTB | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M5 M10 N3 N9 | Test P1 and P2. |
| 9AK8 Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M5 M10 N4 N9 | Test P1, P2 and P3. Reject if below 4. |
| 9AK8 Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M5 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 9AQ8 | A4 B5 C3 C8 D2 D7 F1 F6 I6 I7 J1 K5 L1 L6 L7 M5 M10 N4 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| •9AU7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K9 L1 L6 L7 M5 M10 N4 N9 | Test P1 and P2. |
| 9BR7 Triode Unit | A4 B5 C3 D2 G1 J1 K7 L1 L6 L7 M5 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 9BR7 Diode Unit | A4 B5 C8 F6 G7 I6 I10 K7 L3 L6 L8 M5 M10 N4 N9 | Test P1 and P2. Reject if below 4. |
| 9BR8 Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K9 L1 L6 L8 M5 M10 N4 N9 | |
| 9BR8 Triode Unit | A4 B5 C3 D1 G2 I6 I9 J1 K2 L1 L6 L7 M5 M10 N4 N9 | |
| 9CL8 Tetrode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N4 N9 | |
| 9CL8 Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K1 L1 L6 L7 M5 M10 N4 N9 | |
| 9DZ8 Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M4 M10 N3 N9 | |
| 9DZ8 Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M4 M10 N3 N9 | |
| 9EF6 | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M5 M10 N5 N9 | |
| 9U8A Pentode Unit | A4 B5 C7 D2 E3 G6 I7 I10 J1 K6 L1 L6 L7 M5 M10 N4 N9 | |
| 9U8A Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K3 L1 L6 L7 M5 M10 N4 N9 | |
| 9X8 Triode Unit | A4 B5 C6 D2 G3 I7 I9 J1 K4 L1 L6 L7 M5 M10 N4 N9 | |
| 9X8 Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I7 J1 K6 L1 L6 L7 M5 M10 N4 N9 | |
| 10BQ5 | A4 B5 C3 D2 E9 G7 I6 I10 J6 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 10C8 Pentode Unit | A4 B5 C9 D8 E7 G6 I7 I9 J1 K2 L1 L6 L7 M4 M10 N5 N9 | |
| 10C8 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J3 K7 L1 L6 L7 M4 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10DE7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M4 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10DE7 Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K9 L1 L6 L8 M4 M10 N5 N9 | |
| 10DR7 Triode Unit 1 | A4 B5 C8 D7 G6 J1 K6 L1 M5 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10DR7 Triode Unit 2 | A4 B5 C9 D2 G1 J7 K6 L1 L6 L7 M5 M10 N5 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 10EB8 Triode Unit | A4 B5 C1 D2 G3 J1 K4 L1 M4 M10 N5 N9 | |
| 10EB8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M4 M10 N5 N9 | |
| 10EG7 Triode Unit 1 | A7 B8 C6 D4 G5 I6 I10 J7 K6 L1 M5 M10 N5 N9 | |
| 10EG7 Triode Unit 2 | A7 B8 C3 D1 G2 I6 I10 J10 K5 L1 L6 L7 M5 M10 N5 N9 | |
| 10FD7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K6 K7 L1 M4 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10FD7 Triode Unit 2 | A4 B5 C9 D2 D3 G1 I6 I10 J10 K4 L1 L6 L7 M4 M10 N5 N9 | |
| 11C5 | A3 B4 C1 D2 E6 G7 I9 I10 J1 K5 L1 L6 L7 M1 M10 N2 N9 | |
| 11CY7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K7 L1 M1 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 11CY7 Triode Unit 2 | A4 B5 C9 D3 G1 J9 K6 L1 L6 L7 M1 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12A4 | A4 B5 C1 D7 G9 I6 I10 J4 K6 L1 L6 L8 M2 M10 N4 N9 | |
| 12A6, GT | A2 B1 B7 C8 D5 E4 G3 I6 I10 J8 K3 L1 M2 M10 N3 N9 | |
| 12A8GT | A2 B1 B7 B10 C8 D5 G3 G4 G6 I6 I10 J7 K9 L1 L6 L7 M2 M10 N3 N9 | |
| 12AB5 | A4 B5 C7 D3 D6 E1 G9 I6 I7 J1 K7 L1 L6 L7 M2 M10 N3 N9 | |
| 12AC5/UF41 | A1 B8 C3 C7 D6 E5 G2 I6 I10 J4 K2 L1 M2 M10 N3 N9 | Use Special Adapter. |
| 12AC6 | A3 B2 B4 C7 D1 E6 G5 J1 K9 L2 M2 M10 N3 N9 | |
| 12AD6 | A3 B4 C2 C7 D1 G5 G6 I6 I8 J1 K4 L2 M2 M10 N3 N9 | |
| 12AD7 | A4 B5 C3 C8 D2 D7 F6 G1 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 12AE6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12AE6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J1 K10 L2 M2 M10 N3 N9 | |
| 12AE7 Triode Unit 1 | A4 B5 C8 D7 G6 J1 K7 L2 L6 L7 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12AE7 Triode Unit 2 | A4 B5 C3 D2 G1 I7 I9 J1 K5 L2 L6 L7 M2 M10 N3 N9 | |
| 12AF3 | A4 B5 C10 G9 I6 I10 K5 L4 L6 L10 M1 M10 N2 N9 | Reject if below 4. |
| 12AF6 | A3 B2 B4 C7 D1 E6 G5 I6 I10 J1 K8 L2 M2 M10 N3 N9 | |
| 12AH7GT | A7 B8 C2 C4 D1 D5 F3 G6 I6 I10 J6 K6 L1 M2 M10 N4 N9 | Test P1 and P2. |
| 12AJ6 Diode Unit | A3 B4 C2 F5 G6 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12AJ6 Triode Unit | A3 B4 C2 D1 G7 I7 I9 J1 K9 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12AL5 | A3 B4 C1 C5 F2 G7 I6 I10 K7 L3 L6 L8 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3. |

*• Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 12AL8 Tetrode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K2 L2 L6 L7 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12AL8 Triode Unit | A4 B5 C9 D8 G1 I6 I10 J5 K8 L1 M2 M10 N3 N9 | |
| 12AQ5 | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M2 M10 N3 N9 | |
| 12AS5 | A3 B4 C1 D2 E6 G7 I9 I10 J1 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12AT6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12AT6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12AT7 | A4 B5 C3 C8 D2 D7 F1 G6 J1 K10 L1 L6 L8 M2 M10 N3 N9 | Test P1 and P2. |
| 12AU6 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12AU7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K9 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |
| 12AV5GA | A2 B4 B7 C3 D1 E8 G5 I7 I9 J10 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12AV6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12AV6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12AV7 | A4 B5 C3 C8 D2 D7 F1 G6 I8 I10 J1 K4 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |
| 12AW6 | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12AX4GT, GTA | A7 B8 C3 G5 I6 I10 K1 L4 L6 L9 M2 M10 N3 N9 | Reject if below 3. |
| 12AX5 | A2 B7 C8 F3 G5 I6 I10 K6 L5 L6 L10 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12AX7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 12AY7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J3 K10 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |
| 12AZ7 | A4 B5 C3 C8 D2 D7 F1 G6 I1 K10 L1 L6 L8 M2 M10 N3 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 12B4A | A4 B5 C1 D2 D7 G9 I6 I10 K4 L1 L6 L7 M2 M10 N3 N9 | |
| 12BA6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K10 L1 L6 L8 M2 M10 N3 N9 | |
| 12BA7 | A4 B5 B6 B7 B8 C3 D2 G1 G9 I6 I10 J2 K1 L1 L6 L7 M2 M10 N3 N9 | |
| 12BD5 | A2 B7 C3 D1 E8 G5 I6 I10 J8 K7 L1 L6 L7 M2 M10 N3 N9 | |
| 12BD6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K3 L1 M2 M10 N3 N9 | |
| 12BE6 | A3 B4 C2 C7 D1 G5 G6 I6 I10 J1 K3 L1 L6 L7 M2 M10 N3 N9 | |
| 12BF6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3. |
| 12BF6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J7 K8 L1 M2 M10 N3 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 12BH7, A | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J7 K8 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |
| 12BK5 | A4 B5 C6 D3 D7 E8 G1 I6 I10 J5 K3 L1 L6 L7 M2 M10 N3 N9 | |
| 12BL6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K7 L2 M2 M10 N3 N9 | |
| 12BN6 | A3 B4 C1 D2 G5 G6 G7 J1 K8 L5 L6 L7 M2 M10 N4 N9 | |
| 12BQ6GTB, 12CU6 | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12BR7 Diode Unit | A4 B5 C8 F6 G7 K7 L3 L6 L8 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3. |
| 12BR7 Triode Unit | A4 B5 C3 D2 G1 J1 K10 L1 L6 L8 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12BV7 | A4 B5 C1 C3 D2 E8 G7 I7 I10 J1 K6 L1 L6 L8 M2 M10 N3 N9 | |
| 12BW4 | A4 B5 C9 F1 G7 I6 I10 K5 L5 L6 L10 M2 M10 N3 N9 | Test P1 and P2. |
| 12BY7, A | A4 B5 C1 C3 D2 E8 G7 I7 I10 J1 K6 L1 L6 L8 M2 M10 N3 N9 | |
| 12BZ6 | A3 B4 C2 C7 D1 E6 G5 I6 I8 J1 K9 L1 L6 L8 M2 M10 N4 N9 | |
| 12BZ7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K5 L1 M2 M10 N3 N9 | Test P1 and P2. |
| 12C5 | A3 B4 C1 D2 E6 G7 I6 I10 J9 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12C8 Diode Unit | A7 B1 B2 C8 F4 G5 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12C8 Pentode Unit | A7 B1 B2 C8 D10 E6 G3 I6 I10 J6 K8 L1 M2 M10 N3 N9 | |
| 12CA5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J7 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12CM6 | A4 B5 C7 D3 E1 G9 I6 I10 J8 K8 L1 L6 L7 M2 M10 N4 N9 | |
| 12CN5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J1 K10 L2 L6 L8 M2 M10 N3 N9 | |
| 12CR6 Diode Unit | A3 B4 C1 G2 I6 I10 K8 L3 M2 M10 N3 N9 | Reject if below 2. |
| 12CR6 Pentode Unit | A3 B4 C1 D7 E6 G5 I6 I10 J3 K9 L1 L6 L7 M2 M10 N3 N9 | |
| 12CS6 | A3 B4 B7 C2 D1 G5 G6 I6 I10 J7 K8 L1 L6 L7 M2 M10 N3 N9 | |
| 12CS7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J6 K6 L1 M2 M10 N3 N9 | |
| 12CS7 Triode Unit 2 | A4 B5 C9 D3 G1 I6 I10 J7 K1 L1 M2 M10 N3 N9 | |
| 12CT8 Pentode Unit | A4 B5 C9 D8 E7 G6 I7 I10 J1 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12CT8 Triode Unit | A4 B5 C3 D2 G1 I8 I9 J1 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12CU5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12CU6 | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12CX6 | A3 B2 B4 C7 D1 E6 G5 I6 I10 J2 K1 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12CX6 | A3 B4 C2 C7 D1 E6 G5 I8 I10 J1 K7 L2 L6 L7 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 12CY6 | A3 B2 B4 C7 D1 E6 G5 J2 K5 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12D4 | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M2 M10 N3 N9 | Reject if below 4. |
| 12DA6/UF89 | A4 B1 B5 C3 D2 E8 G7 I6 I10 J4 K7 L1 L6 L7 M2 M10 N4 N9 | |
| 12DB5 | A4 B5 C2 D3 E1 G9 I6 I7 J1 K8 L1 L6 L8 M2 M10 N3 N9 | |
| 12DE8 Pentode Unit | A4 B5 C7 C9 D1 E8 G6 I9 I10 J1 K10 L2 L6 L7 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12DE8 Diode Unit | A4 B5 C2 G3 I6 I10 K9 L3 L6 L9 M2 M10 N3 N9 | Reject if below 4. |
| 12DF7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. Test P1 and P2. |
| 12DK7 Tetrode Unit | A4 B5 C2 D1 E3 G7 I6 I7 J1 K6 L2 L6 L7 M2 M10 N3 N9 | |
| 12DK7 Diode Unit | A4 B5 C2 F9 G6 K8 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12DL8 Diode Unit | A4 B5 C8 F1 G9 I6 I10 K7 L4 L6 L7 M10 M2 N3 N9 | Test P1 and P2. Reject if below 3. |
| 12DL8 Tetrode Unit | A4 B5 C2 D7 E3 G6 I6 I10 J1 K5 L2 L6 L8 M2 M10 N3 N9 | |
| 12DM7 | Use 12AX7 Card. | |
| 12DQ6A | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12DQ7 | A5 B3 B4 C1 D2 E8 G7 I7 I10 J1 K10 L1 L6 L9 M2 M10 N4 N9 | |
| 12DS7 Tetrode Unit | A4 B5 C8 D7 E3 G6 I6 I10 J2 K6 L2 L6 L8 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| •12DS7 Diode Unit | A4 B5 C8 F1 G9 I6 I10 J3 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12DT5 | A4 B5 C7 D3 E1 G9 I6 J9 K6 L6 L7 L1 M10 M2 N4 N9 | |
| 12DT6 | A3 B4 C2 D1 D7 E6 G5 I6 I10 J4 K7 L1 M2 M10 N4 N9 | Reject if below 3. Depress Special Leakage/Gas Button in gas test. |
| 12DT7 | Use 12AX7 Card. | |
| 12DT8 | A4 B5 C3 C8 D2 D7 F1 G6 J1 K6 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Special Leagage Test. |
| 12DU7 Tetrode Unit | A4 B5 C2 D1 E3 G6 I7 I10 J1 K4 L2 L6 L7 M2 M10 N3 N9 | |
| 12DU7 Diode Unit | A4 B5 C2 F9 G7 K6 L4 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12DV7 Diode Unit | A4 B5 C1 F3 G2 K6 L4 M2 M10 N4 N9 | Test P1 and P2. Reject if below 3. |
| 12DV7 Triode Unit | A4 B5 C8 D7 G6 J1 K9 K10 L2 M2 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12DV8 Tetrode Unit | A4 B5 C2 C8 D7 E3 G6 I6 I9 J1 K8 K9 L2 L6 L8 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12DV8 Diode Unit | A4 B5 C2 C8 F1 G9 I6 I10 K9 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12DW5 | A4 B5 C7 D3 D6 E1 G9 I6 I10 J8 K1 L6 L7 M2 M10 N4 N9 | |
| 12DW7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K6 L1 M2 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12DW7 Triode Unit 2 | A4 B5 C3 D2 G1 I6 I10 J4 K2 L1 M2 M10 N4 N9 | |
| 12DW8 Triode Unit 1 | A4 B5 C8 D7 G6 I7 I10 J2 K3 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12DW8 Triode Unit 2 | A4 B5 C3 D2 G1 I8 I10 J1 K6 L2 L6 L7 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| •12DW8 Diode Unit | A4 B5 C8 G9 I6 I10 K4 L3 M2 M10 N3 N9 | Reject if below 4. |
| 12DY8 Tetrode Unit | A4 B5 C2 D1 E3 G6 I6 I10 J2 K3 L2 L6 L7 M2 M10 N3 N9 | |
| 12DY8 Triode Unit | A4 B5 C7 D9 G8 I6 I10 J1 K10 L2 L6 L7 M2 M10 N3 N9 | |
| 12DZ6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J3 K2 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12DZ6 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K8 L2 L6 L7 M2 M10 N3 N9 | |
| 12DZ8 Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M2 M10 N3 N9 | |
| 12DZ8 Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M2 M10 N3 N9 | |
| 12EA6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K7 L2 L6 L7 M2 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12EC8 Triode Unit | A4 B5 C3 D1 G2 J1 K8 L2 L6 L7 M2 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12EC8 Pentode Unit | A4 B5 C8 D9 E7 G6 J3 K10 L2 M2 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12ED5 | A3 B4 C1 D5 E6 G7 I6 I10 J6 K7 L1 L6 L8 M2 M10 N3 N9 | |
| 12EF6 | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M2 M10 N4 N9 | |
| 12EG6 | A3 B4 C1 C2 D7 E6 G5 I7 I10 J1 K9 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12EH5 | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M2 M10 N3 N9 | |
| 12EK6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J1 K6 L2 L6 L7 M2 M10 N3 N9 | |
| 12EL6 Diode Unit | A3 B4 C7 F5 G6 I6 I10 K1 L4 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12EL6 Triode Unit | A3 B4 C7 D1 G2 I6 I10 J1 K8 L2 M2 M10 N3 N9 | |
| 12EM6 Tetrode Unit | A4 B5 C2 D1 E3 G6 I6 I8 J1 K10 L2 L6 L8 M2 M10 N3 N9 | |
| 12EM6 Diode Unit | A4 B5 C2 G9 I6 I10 K2 L4 M2 M10 N3 N9 | Reject if below 2. |
| 12EN6 | A2 B7 C8 D5 E4 G3 I6 I10 J9 K10 L1 L6 L9 M2 M10 N4 N9 | |
| 12EQ7 Pentode Unit | A4 B1 B5 B9 C3 D2 E6 G7 J1 K5 L1 M2 M10 N4 N9 | |
| 12EQ7 Diode Unit | A4 B5 B9 C3 G8 K3 L4 M2 M10 N4 N9 | Reject if below 3. |
| 12EZ6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J3 K8 L2 M2 M10 N3 N9 | |
| 12F5GT | A2 B7 C8 D10 G4 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Connect external lead to tube cap. |
| 12F8 Diode Unit | A4 B5 C7 F1 G6 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |

** Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 12F8 Pentode Unit | A4 B5 C7 C9 D8 E2 G3 I6 I10 J1 K8 L2 M2 M10 N3 N9 | |
| 12FK6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12FK6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J1 K7 L2 M2 M10 N3 N9 | |
| 12FK6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K1 L4 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12FK6 Triode Unit | A3 B4 C2 D1 G7 J1 K8 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12FM6 Diode Unit | A3 B4 C2 F5 G6 K8 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12FM6 Triode Unit | A3 B4 C2 D1 G7 J2 K8 K9 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12FQ8 Triode 1 & 2 | A4 B5 C9 D7 F6 G8 I6 I8 J2 K9 K10 L1 M2 M10 N4 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 12FQ8 Triode 3 & 4 | A4 B5 C9 D2 F3 G1 I6 I8 J2 K9 K10 L1 M2 M10 N4 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 12FR8 Triode Unit | A4 B5 C2 D1 G9 J2 K9 K10 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12FR8 Pentode Unit | A4 B5 D3 E6 G7 J2 K3 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12FR8 Diode Unit | A4 B5 C2 G8 I6 I10 K10 L3 M2 M10 N3 N9 | Reject if below 2. |
| 12FT6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J1 K10 L2 M2 M10 N3 N9 | |
| 12FT6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12FX8 Triode Unit | A4 B5 D6 G8 J2 K8 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12FX8 Heptode Unit | A4 B4 C7 D2 D9 E1 G3 I6 I10 J2 K9 K10 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12GA6 | A3 B4 C2 D1 D7 E6 G5 I8 I10 J1 K8 K9 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12GC6 | A2 B7 C3 D5 E4 E8 G10 I7 I10 J10 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12GW6 | A2 B7 C8 D5 E4 G10 I7 I10 J10 K4 L1 L6 L7 M2 M10 N3 N9 | |
| 12H6 | A2 B7 C4 C8 F3 G5 K9 L3 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3. |
| 12J5GT | A2 B1 B7 C8 D5 G3 I6 I10 J3 K1 L1 M2 M10 N3 N9 | |
| 12J7GT | A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J6 K8 L1 M2 M10 N3 N9 | |
| 12J8 Diode Unit | A4 B5 C7 F8 G9 K10 L3 L6 L9 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3. |
| 12J8 Tetrode Unit | A4 B5 C2 D1 E3 G6 I6 I10 J1 K4 L2 L6 L7 M2 M10 N3 N9 | |
| 12K5 | A3 B4 C1 D2 E5 E6 G7 I6 I10 J4 K6 L2 L6 L7 M2 M10 N3 N9 | |
| 12K7GT | A2 B1 B7 C5 C8 D10 E4 G3 I6 I10 J2 K6 L1 M2 M10 N3 N9 | |
| 12K8 Triode Unit | A2 B1 B7 C8 D5 G6 I6 I10 J1 K8 L1 L6 L7 M2 M10 N3 N9 | |
| 12K8 Hexode Unit | A2 B1 B7 B10 C8 D5 G3 G4 I6 I7 J1 K5 L1 M2 M10 N3 N9 | |
| 12L6GT | A7 B1 B2 C8 D5 E4 G3 I6 I10 J9 K7 L1 L6 L8 M2 M10 N3 N9 | |
| 12L8 | A6 B7 C2 D1 D3 E5 F4 G8 I6 I10 J6 K3 L1 M2 M10 N3 N9 | Test P1 and P2. |
| 12Q7GT Diode Unit | A7 B1 B2 C8 F4 G5 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12Q7GT Triode Unit | A7 B1 B2 C8 D10 G3 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12R5 | A3 B4 C1 D2 D5 E6 G7 I6 I9 J9 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12S7/UAF42 Diode Unit | A1 B8 C7 G3 K9 L3 M2 M10 N3 N9 | Reject if below 3. Use Special Adapter. |
| 12S7/UAF42 Pentode Unit | A1 B8 C7 D6 E5 G2 I6 I10 J3 K3 L1 M2 M10 N3 N9 | Use Special Adapter. |
| 12S8GT Triode Unit | A7 B8 C2 D10 G6 I6 I10 J2 K9 L1 M2 M10 N3 N9 | |
| 12S8GT Diode Unit 1 | A8 B7 C5 G3 I6 I10 K1 L4 M2 M10 N3 N9 | Reject if below 3. |
| 12S8GT Diode Unit 2-3 | A8 B7 C2 F1 G4 I6 I10 K2 L4 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12SA7, GT | A2 B1 B7 C6 C8 D5 G3 G4 I6 I10 J6 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12SC7 | A7 B1 B8 C6 D3 D4 F2 G5 I6 I10 J2 K9 L1 M2 M10 N3 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 12SF5GT | A7 B1 B8 C2 D3 G5 I7 I9 J2 K8 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12SF7 Diode Unit | A7 B1 B8 C3 G5 K10 L3 M2 M10 N3 N9 | Reject if below 2. |
| 12SF7 Pentode Unit | A7 B1 B8 C3 D2 E4 G6 I6 I10 J2 K4 L1 M2 M10 N3 N9 | |
| 12SG7 | A7 B1 B2 C3 D4 E6 G8 I6 I10 J2 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 12SH7 | A7 B1 B2 C3 C5 D4 E6 G8 I6 I10 J2 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12SJ7, GT | A7 B1 B2 C3 C5 D4 E6 G8 I7 I10 J6 K7 L1 M2 M10 N3 N9 | |
| 12SK7, GT | A7 B1 B2 C3 C5 D4 E6 G8 I6 I10 J4 K9 L1 L6 L7 M2 M10 N3 N9 | |
| 12SL7, GT | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. |
| *12SN7GTA | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M2 M10 N3 N9 | Test P1 and P2. |
| 12SQ7, GT Diode Unit | A7 B1 B8 C3 F4 G5 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12SQ7 Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J2 K9 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12SR7, GT Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J7 K8 L1 M2 M10 N3 N9 | |

** Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 12SR7 Diode Unit | A7 B1 B8 C3 F4 G5 K8 L4 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 3. |
| 12SW7 Diode Unit | A7 B1 B8 C3 F4 G5 K8 L3 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12SW7 Triode Unit | A7 B1 B8 C3 D2 G6 I6 I10 J7 K7 L1 M2 M10 N3 N9 | |
| 12SX7GT | A7 B8 C3 C6 D1 D4 F2 G5 I6 I10 J3 K1 L1 M2 M10 N3 N9 | Test P1 and P2. |
| 12SY7 | A2 B1 B7 C6 C8 D5 G3 G4 I6 I10 J6 K7 L1 L6 L7 M2 M10 N3 N9 | |
| 12U7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J1 K7 K8 L2 M2 M10 N3 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 12V6GT | A7 B2 C8 D5 E4 G3 I6 I7 J1 K1 L1 L6 L7 M2 M10 N3 N9 | |
| 12W6GT | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M2 M10 N3 N9 | |
| 12X4 | A3 B4 C7 F1 G6 K6 L5 L6 L10 M2 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 12Z3 | A1 B4 C3 G2 I6 I10 K6 L4 L6 L10 M2 M10 N3 N9 | Reject if below 3. |
| 13CM5 | A2 B7 C8 D5 E4 G10 I6 I10 J10 K7 L1 L6 L8 M2 M10 N4 N9 | |
| 13DE7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M1 M10 N3 N9 | |
| 13DE7 Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K9 L1 L6 L8 M1 M10 N3 N9 | |
| 13DR7 Triode Unit 1 | A4 B5 C8 D7 G6 J1 K6 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 13DR7 Triode Unit 2 | A4 B5 C9 D2 G1 J7 K6 L1 L6 L7 M2 M10 N4 N9 | |
| 13EM7 Triode Unit 1 | A7 B8 C6 D4 G5 I6 I10 J2 K6 K7 L1 M1 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 13EM7 Triode Unit 2 | A7 B8 C3 D1 G2 I6 I10 J10 K4 L1 L6 L7 M1 M10 N3 N9 | |
| 13FD7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K6 K7 L1 M2 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 13FD7 Triode Unit 2 | A4 B5 C9 D2 D3 G1 I6 I10 J10 K4 L1 L6 L7 M2 M10 N4 N9 | |
| 14A4 | A1 B8 C7 D6 G2 I6 I10 J4 K2 K3 L1 M2 M10 N4 N9 | |
| 14A5 | A1 B8 C7 D6 E3 G2 I8 I10 J1 K1 L1 M2 M10 N5 N9 | |
| 14A7 | A1 B5 B8 C4 C7 D6 E3 G2 I6 I10 J2 K2 L1 M2 M10 N3 N9 | |
| 14AF7 | A8 B1 C2 C7 D4 D5 F3 G6 I6 I10 J1 K1 L1 M2 M10 N3 N9 | Test P1 and P2. |
| 14B6 Diode Unit | A8 B1 C4 C7 F5 G6 I6 I10 K10 L3 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 14B6 Triode Unit | A8 B1 C4 C7 D3 G2 I6 I10 J2 K9 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 14B8 | A1 B8 C7 D4 G2 G3 G5 G6 I6 I10 J7 K8 L1 L6 L7 M2 M10 N5 N9 | |
| 14C5 | A1 B8 C7 D6 E3 G2 I6 I10 J8 K8 L1 L6 L7 M2 M10 N5 N9 | |
| 14C7 | A8 B1 B5 C4 C7 D6 E3 G2 I6 I10 J6 K7 L1 M2 M10 N3 N9 | |
| 14E6 Diode Unit | A1 B8 C7 F6 G5 I6 I10 K10 L3 M2 M10 N5 N9 | Test P1 and P2. Reject if below 2. |
| 14E6 Triode Unit | A1 B8 C7 D3 G2 I6 I10 J6 K10 L1 L6 L7 M2 M10 N5 N9 | |
| 14E7 Diode Unit | A1 B8 C7 F4 G3 I6 I10 K10 L3 M2 M10 N5 N9 | Test P1 and P2. Reject if below 2. |
| 14E7 Pentode Unit | A1 B8 C7 D6 E5 G2 I6 I10 J2 K6 L1 M2 M10 N5 N9 | |
| 14F7 | A8 B1 C2 C7 D4 D5 F3 G6 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 14F8 | A2 B7 C4 C5 D1 D8 F3 G6 J3 K5 L1 M2 M10 N3 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 14H7 | A1 B5 B8 C4 C7 D6 E3 G2 I6 I10 J2 K5 L1 L6 L7 M2 M10 N5 N9 | |
| 14J7 Triode Unit | A1 B8 C7 D4 G3 I6 I10 J3 K7 L1 M2 M10 N5 N9 | |
| 14J7 Heptode Unit | A1 B8 C4 C7 D6 E5 G2 I6 I10 J3 K5 L1 M2 M10 N5 N9 | |
| 14L7/UBC41 Diode Unit | A1 B8 C7 F6 G5 K2 K3 L4 M1 M10 N4 N9 | Use Special Adapter. Test P1 and P2. Reject if below 4. |
| 14L7/UBC41 Triode Unit | A1 B8 C7 D3 G2 J2 K8 L1 M1 M10 N4 N9 | Use Special Adapter. Depress Special Leakage/Gas Button in gas test. |
| 14N7 | A1 B8 C2 C7 D4 D5 F3 G6 I6 I10 J3 K1 L1 M2 M10 N5 N9 | Test P1 and P2. |
| 14Q7 | A8 B1 B5 B6 C7 D4 G2 G3 I6 I10 J2 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 14R7 Diode Unit | A8 B1 C7 F3 G4 I6 I10 K1 L1 L4 M2 M10 N8 N9 | Test P1 and P2. Reject if below 1. |
| 14R7 Pentode Unit | A8 B1 C7 D6 E5 G2 I6 I10 J2 K1 L1 M2 M10 N3 N9 | |
| 14S7 Triode Unit | A1 B8 C7 D4 G3 I6 I10 J3 K7 L1 M2 M10 N5 N9 | |
| 14S7 Heptode Unit | A1 B8 C4 C7 D6 E5 G2 I6 I10 J3 K1 L1 M2 M10 N5 N9 | |
| 14V7 | A1 B5 B8 C4 C7 D6 E3 G2 I8 I10 J1 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 14W7 | A1 B8 C4 C5 C7 D6 E3 G2 I8 I10 J1 K6 L1 L6 L7 M2 M10 N5 N9 | |
| 14X7 Diode Unit | A1 B8 C4 C7 F6 G5 I6 I10 K7 L3 L6 L8 M2 M10 N5 N9 | Test P1 and P2. Reject if below 2. |
| 14X7 Triode Unit | A1 B8 C4 D3 G2 I6 I10 J2 K9 L1 M2 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 14Y4 | A1 B8 C7 F3 G6 K6 L5 L6 L10 M2 M10 N5 N9 | Test P1 and P2. Reject if below 4. |
| 15A6/PL83 | A4 B5 C3 C6 D2 E1 G7 I6 I10 J3 K6 K7 L1 L6 L8 M5 M9 N2 N8 | |
| 15CW5 | A4 B5 C3 D2 E9 G7 I6 I10 J9 K6 L1 L6 L8 M5 M9 N1 N8 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 15DQ8/PCL84 Pentode Unit | A4 B5 C7 D8 E9 G6 J1 K5 K6 L1 L6 L7 M4 M9 N1 N8 | |
| 15DQ8/PCL84 Triode Unit | A4 B5 C3 D1 G2 J2 K6 L1 M4 M9 N1 N8 | Depress Special Leakage/Gas Button in gas test. |
| 15EW6 | A3 B4 B7 C2 D1 E6 G5 I7 I9 J1 K7 L1 L6 L8 M5 M9 N1 N8 | Depress Special Leakage/Gas Button in gas test. |
| 16A5/PL82 | A4 B5 C3 D2 E9 G7 I6 I10 J9 K1 L1 L6 L7 M3 M9 N1 N8 | |
| 16A8/PCL82 Triode Unit | A4 B5 C8 D1 G9 I6 I10 J2 K5 K6 L1 M5 M9 N2 N8 | Depress Special Leakage/Gas Button in gas test. |
| 16A8/PCL82 Pentode Unit | A4 B5 C2 D3 F7 G6 I6 I10 J9 K3 L1 L6 L7 M5 M9 N2 N8 | Depress Special Leakage/Gas Button in gas test. |
| 17AV5GA | A2 B7 C3 D1 E8 G5 I7 I9 J10 K6 L1 L6 L7 M4 M9 N2 N8 | |
| 17AX4GT | A7 B8 C3 G5 I6 I10 K1 L4 L6 L9 M4 M9 N2 N8 | Reject if below 4. |
| 17BQ6GTB | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M4 M9 N2 N8 | |
| 17C5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K2 L1 L6 L7 M4 M9 N2 N8 | |
| 17C8/UBF80 Diode Unit | A4 B5 C3 F7 G8 I6 I10 K1 L4 M3 M9 N2 N8 | Test P1 and P2. Reject if below 3. |
| 17C8/UBF80 Pentode Unit | A4 B5 B9 C3 D2 E1 G6 I6 I10 J6 K3 K4 L1 M3 M9 N2 N8 | |
| 17CA5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J5 K1 L1 L6 L7 M3 M9 N2 N8 | |
| 17CU5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K2 L1 L6 L7 M3 M9 N2 N8 | |
| 17D4 | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M4 M9 N2 N8 | Reject if below 4. |
| 17DE4 | A7 B8 C3 G5 I6 I10 K7 L4 L6 L10 M3 M9 N2 N8 | Reject if below 4. |
| 17DQ6A | A2 B7 C8 D5 E4 G10 I7 I9 J10 K5 L1 L6 L7 M3 M9 N2 N8 | |
| 17EW8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K9 L1 L6 L8 M3 M9 N2 N8 | Test P1 and P2. |
| 17GW6 | A2 B7 C8 D5 E4 G10 I7 I10 J10 K4 L1 L6 L7 M3 M9 N2 N8 | |
| 17H3 | A4 B5 C1 G3 G8 I7 I10 K8 L4 L6 L10 M4 M9 N2 N8 | Reject if below 4. |
| 17L6GT | A2 B7 C8 D5 E4 G3 I6 I10 J8 K10 L1 L6 L9 M4 M9 N2 N8 | |
| 17N8/UBF80 Diode Unit | A4 B5 C3 F7 G8 I6 I10 K1 L4 M3 M9 N2 N8 | Test P1 and P2. Reject if below 3. |
| 17N8/UBF80 Pentode Unit | A4 B5 B9 C3 D2 E1 G6 I6 I10 J6 K3 K4 L1 M3 M9 N2 N8 | |
| 17R5 | A3 B4 C1 D2 E6 G7 I6 I10 J9 K10 L1 L6 L9 M4 M9 N2 N8 | |
| 17W6 | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M3 M9 N2 N8 | |
| 17Z3/PY81 | A4 B5 C10 G9 I6 I10 K6 L4 L6 L10 M3 M9 N2 N8 | Reject if below 4. |
| 18A5 | A2 B7 C3 D1 E8 G5 I8 I10 J10 K10 L1 L6 L8 M5 M9 N3 N8 | |
| 18DZ8 Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M5 M9 N3 N8 | |
| 18DZ8 Pentode Unit | A4 B4 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M5 M9 N3 N8 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 18FW6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 K7 L1 L6 L7 M3 M9 N2 N8 | |
| *18FX6 | A3 B4 C2 C7 D1 G5 G6 I7 I10 J1 K4 L1 L6 L7 M3 M9 N2 N8 | |
| 18FY6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K3 L4 M3 M9 N2 N8 | Test P1 and P2. Reject if below 4. |
| *18FY6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K10 L1 L6 L7 M3 M9 N2 N8 | Depress Special Leakage/Gas Button in gas test. |
| 19AJ8/UCH81 Triode Unit | A4 B1 B2 B5 B6 B7 C3 D9 G8 I8 I10 J1 K7 K8 L1 L6 L7 M5 M9 N3 N8 | |
| 19AJ8/UCH81 Heptode Unit | A4 B5 B7 B8 B9 C3 D2 E1 G6 I6 I9 J4 K3 L1 M5 M9 N3 N8 | |
| 19AQ5 | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M4 M9 N3 N8 | |
| 19AU4 | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M5 M9 N3 N8 | Reject if below 4. |
| 19BG6G, GA | A7 B2 C3 D5 E8 G10 I6 I10 J9 K10 L1 L6 L8 M5 M9 N3 N8 | |
| 19C8 Diode Unit | A4 B5 C3 C7 F2 G1 H6 I6 I10 K7 L3 L6 L8 M4 M9 N3 N8 | Test P1, P2 and P3. Reject if below 3. |
| 19C8 Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M4 M9 N3 N8 | Depress Special Leakage/Gas Button in gas test. |
| 19CL8 Tetrode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 L1 L6 L7 M4 M9 N3 N8 | |
| 19CL8 Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K1 L1 L6 L7 M4 M9 N3 N8 | |
| 19D8 | Use 19AJ8 Data. | |
| 19DE7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M5 M9 N4 N8 | |
| 19DE7 Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K9 L1 L6 L8 M5 M9 N4 N8 | |
| 19EA8 Triode Unit | A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M4 M9 N3 N8 | |
| 19EA8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M4 M9 N3 N8 | |
| 19EZ8 | A5 B4 C1 D2 D7 D9 F6 G3 H8 I6 I10 J2 K6 K7 L1 L6 L7 M4 M9 N3 N8 | Test P1, P2 and P3. Reject if below 4. |
| 19J6 | A3 B4 C7 D5 D6 F1 G2 I7 I9 J1 K5 L1 L6 L7 M5 M9 N3 N8 | Test P1 and P2. |
| 19T8 Diode Unit | A4 B5 C3 C7 F2 G6 H1 I6 I10 K7 L3 L6 L8 M5 M9 N3 N8 | Test P1, P2 and P3. Reject if below 3. |
| 19T8 Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K8 L1 M5 M9 N3 N8 | Depress Special Leakage/Gas Button in gas test. |
| 19V8 Dual Diode | A4 B5 C3 C8 F2 G7 I6 I10 K1 L3 L6 L7 M4 M9 N3 N8 | Test P1 and P2. Reject if below 4. |
| 19V8 Diode Unit | A5 B4 C3 G9 I6 I10 K2 L4 M4 M9 N3 N8 | Reject if below 2. |
| 19V8 Triode Unit | A4 B5 C3 D6 G1 I7 I10 J1 K7 L1 M4 M9 N3 N8 | |
| 19X3/PY80 | A4 B5 C3 G9 I6 I10 K4 K5 L4 L6 L10 M5 M9 N4 N8 | Reject if below 4. |
| 19X8 Pentode Unit | A4 B5 C1 C6 D7 E8 G9 I6 I8 J1 K6 L1 L6 L7 M5 M9 N3 N8 | |
| 19X8 Triode Unit | A4 B5 C6 D2 G3 I7 I9 J1 K4 L1 L6 L7 M5 M9 N3 N8 | |
| 19Y3/PY82 | A4 B5 C3 G9 I6 I10 K2 K3 L4 L6 L10 M5 M9 N5 N8 | Reject if below 4. |
| 20EQ7 Diode Unit | A4 B5 B9 C3 G8 K3 L4 M5 M9 N5 N8 | Reject if below 3. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 20EQ7 Pentode Unit | A4 B1 B5 B9 C3 D2 E6 G7 J1 K5 L1 M5 M9 N5 N8 | |
| 20EZ7 | A1 B2 C4 C9 D5 D8 F6 G7 I6 I10 J2 K8 L1 M5 M9 N5 N8 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 21A8/PL81 | A4 B5 C3 C9 D2 E8 G10 I6 I10 J10 K3 L1 L6 L7 M2 M9 N4 N8 | |
| 21EX6 | A2 B7 C3 D5 E8 G10 I6 I7 J1 K2 L1 L6 L7 M2 M9 N3 N8 | |
| 22DE4 | A7 B8 C3 G5 I6 I10 K7 L4 L6 L10 M2 M9 N3 N8 | Reject if below 4. |
| 24A | A1 B5 C4 D10 E3 G2 I6 I10 J4 K9 L1 M2 M6 N4 N6 | |
| 25A6, GT | A2 B7 C8 D5 E4 G3 J10 K6 L1 M5 M10 N1 N8 | |
| 25A7G, GT Diode Unit | A2 B7 C1 G6 I6 I10 K7 L4 L6 L10 M5 M10 N1 N8 | Reject if below 4. |
| 25A7GT Pentode Unit | A2 B7 C8 D5 E4 G3 J4 K6 L1 L6 L7 M5 M10 N1 N8 | |
| 25AC5G, GT | A2 B7 C8 D5 G3 I7 I9 J1 K9 L1 M5 M10 N1 N8 | |
| 25AU4 | A7 B8 C3 G5 I6 I10 K4 L4 L6 L10 M1 M9 N5 N8 | Reject if below 4. |
| 25AV5GT, GA | A6 A7 B2 C3 C4 D1 E8 G5 I7 I9 J10 K6 L1 L6 L7 M1 M9 N5 N8 | |
| 25AX4GT | A7 B8 C3 G5 I6 I10 K8 L4 L6 L10 M1 M9 N5 N8 | Reject if below 4. |
| 25B6G | A2 B7 C8 D5 E4 G3 I9 I10 J1 K6 L1 L6 L7 M5 M10 N1 N8 | |
| 25BK5 | A4 B5 C6 D3 E8 G1 I6 I10 J5 K2 K3 L1 L6 L7 M5 M10 N1 N8 | |
| 25BQ6GT, GBT/25CU6 | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M1 M9 N5 N8 | |
| 25C5 | A3 B4 C1 D2 E6 G7 I6 I10 J9 K2 L1 L6 L7 M5 M10 N1 N8 | |
| 25C6G, GA | A2 B7 C8 D5 E4 G3 I6 I10 J10 K3 L1 L6 L7 M4 M10 N1 N8 | |
| 25CA5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J7 K1 L1 L6 L7 M1 M9 N5 N8 | |
| 25CD6, GA GB | A2 B7 C3 D5 E8 G10 I6 I7 J10 K5 L1 L6 L7 M1 M9 N5 N8 | |
| 25CU6 | A2 B7 C8 D5 E4 G10 I8 I10 J10 K5 L1 L6 L7 M1 M9 N5 N8 | |
| 25D4 | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M1 M9 N5 N8 | Reject if below 4. |
| 25DN6 | A2 B7 C3 D5 E8 G10 I8 I10 J10 K4 L1 L6 L7 M1 M9 N5 N8 | |
| 25DQ6 | A2 B7 C8 D5 E4 G10 I7 I10 J10 K5 L1 L6 L7 M1 M9 N5 N8 | |
| 25DT5 | A4 B5 C7 D3 E1 G9 I6 I10 J9 K6 L1 L6 L7 M1 M9 N5 N8 | |
| 25E5/PL36 | A2 B7 C8 D5 E4 G10 I6 I10 J10 K7 L1 L6 L7 M4 M10 N1 N8 | |
| 25E6 | Use 25C6 Data. | |
| 25EC6 | A2 B7 C3 D5 E8 G10 I6 I9 J10 K7 K8 L1 L6 L8 M1 M9 N5 N8 | |
| 25EH5 | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M1 M9 N5 N8 | |
| 25F5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K4 L1 L6 L7 M1 M9 N5 N8 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 25FY8 Triode Unit | A4 B5 C8 D1 G9 J2 K5 L1 M1 M9 N5 N8 | |
| 25FY8 Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I10 J1 K2 L1 L6 L7 M1 M9 N5 N8 | |
| 25L6, GT | A2 B1 B7 C8 D5 E4 G3 I6 I10 J9 K7 L1 L6 L8 M1 M9 N5 N8 | |
| 25U4GT | A7 B8 C3 C5 I6 I10 K5 L4 L6 L10 M5 M10 N1 N8 | Reject if below 3. |
| 25W4GT | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M1 M9 N5 N8 | Reject if below 4. |
| 25W6GT | A2 B7 C8 D5 E4 G3 I6 I10 J9 K1 L1 L6 L7 M1 M9 N5 N8 | |
| 25Y5 | A1 B6 C3 C4 F2 G5 I6 I10 K6 L4 L6 L9 M5 M10 N1 N8 | Test P1 and P2. Reject if below 4. |
| 25Z5 | A1 B6 C3 C4 F2 G5 I6 I10 K7 L4 L6 L10 M1 M9 N5 N8 | Test P1 and P2. Reject if below 4. |
| 25Z6G, GT | A2 B7 C4 C8 F3 G5 I6 I10 K7 L4 L6 L10 M1 M9 N5 N8 | Test P1 and P2. Reject if below 4. |
| 26A6 | A3 B4 C2 C7 D1 E6 G5 I8 I10 J1 K6 L1 L6 L7 M1 M9 N5 N8 | |
| 26A7GT | A6 B7 C2 D1 D3 E5 F8 G4 I6 I10 J5 K1 L2 M3 M10 N1 N8 | Test P1 and P2. |
| 26C6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K10 L3 M4 M10 N2 N8 | Test P1 and P2. Reject if below 2. |
| 26C6 Triode Unit | A3 B4 C2 D1 G7 I8 I10 J6 K7 L1 M4 M10 N2 N8 | |
| 26D6 | A3 B4 C2 D1 G5 G6 G7 I6 I10 J6 K7 L1 L6 L7 M4 M10 N2 N8 | |
| 26Z5W | A4 B5 C3 C8 F1 G6 I6 I10 K8 L4 L6 L10 M4 M10 N1 N8 | Test P1 and P2. Reject if below 2. |
| 27 | A1 B5 C4 D3 G2 I6 I9 J8 K9 L1 M4 M6 N2 N6 | |
| 28D7, W | A1 B8 C6 D2 D7 E3 F4 G5 I6 I10 J3 K2 L2 M3 M10 N1 N8 | Test P1 and P2. Reject if below 4. |
| 31A3/UY41 | A1 B8 C7 G2 I6 I10 K8 L4 L6 L10 M1 M10 N2 N8 | Use Special Adapter. Reject if below 4. |
| 32 | A1 B4 D10 E3 G2 J8 K3 L1 M3 M6 N2 N6 | Use WG-337A-4 Adapter. |
| 32A8 Triode Unit | A4 B5 C8 D1 G9 J2 K7 L1 M3 M10 N2 N8 | Depress Special Leakage/Gas Button in gas test. |
| 32A8 Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I7 J1 K4 L1 I6 I7 M3 M10 N2 N8 | |
| 32ET5 | A3 B4 C1 D2 E6 G7 I6 I10 J9 L1 L6 L7 M2 M10 N3 N8 | |
| 34GD5 | A3 B4 C1 D2 D5 E6 G7 I8 I9 J1 K5 L1 L6 L7 M5 M8 N1 N7 | |
| 35A5 | A1 B8 C7 D6 E3 G2 I6 I10 J9 K3 L1 L6 L7 M1 M10 N5 N8 | |
| 35B5 | A3 B4 C2 D1 E6 G5 I6 I10 J9 K4 L1 L6 L7 M1 M10 N5 N8 | |
| 35C5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K4 L1 L6 L7 M1 M10 N5 N8 | |
| 35CD6GA | A2 B7 C3 D5 E8 G10 I6 I7 J10 K5 L1 L6 L7 M5 N1 N7 N8 | |
| 35DZ8 Triode Unit | A4 B5 C8 D1 G9 I6 I9 J3 K8 L1 M1 M10 N5 N8 | |
| 35DZ8 Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I9 J2 K4 L1 L6 L7 M1 M10 N5 N8 | |
| 35EH5 | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M5 M10 N1 N8 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 35GL6 | A3 B4 C1 D2 E5 G7 I6 I10 J9 K7 L1 L6 L8 M1 M10 N5 N8 | |
| 35L6GT | A7 B2 C8 D5 E4 G3 I6 I10 J9 K4 L1 L6 L7 M1 M10 N5 N8 | |
| 35W4 | A3 B4 C7 G5 I6 I10 K5 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4. |
| 35Y4 | A1 B8 C7 G2 I6 I10 K3 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4. |
| 35Z3 | A1 B8 C7 G2 I6 I10 K4 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4. |
| 35Z4GT | A2 B7 C8 G5 I6 I10 K3 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4. |
| 35Z5GT | A2 B7 C8 G5 I6 I10 K5 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4. |
| 36AM3 | A3 B4 C7 G5 I6 I10 K5 L4 L6 L10 M1 M10 N5 N8 | Reject if below 4. |
| 38A3/UY85 | A4 B5 C3 G9 I6 I10 K5 L4 L6 L10 M5 M8 N3 N7 | Reject if below 4. |
| 41 | A1 B6 C5 D4 E3 G2 I6 I10 J9 K5 L1 M5 M10 N2 N9 | |
| 42 | A1 B6 C5 D4 E3 G2 I6 I10 J9 K5 L1 M3 M10 N1 N9 | |
| 43 | A1 B6 C5 D4 E3 G2 J10 K6 L1 M5 M10 N1 N8 | Use Adapter WG-377A-6. |
| 45 | A4 B1 D3 G2 J10 K7 L1 M2 M6 N4 N6 | |
| 45A5/UL41 | A1 B8 C3 C7 D6 E5 G2 I6 I10 J6 K8 L1 L6 L8 M5 M7 N1 N6 | Use Special Adapter. |
| 45B5 | A4 B5 C3 D2 E9 G7 I6 I10 J9 K6 L1 L6 L8 M5 M7 N1 N6 | |
| 45Z3 | A1 B7 C4 G2 I6 I10 K8 L4 L6 L10 M1 M7 N5 N7 | Reject if below 4. |
| 45Z5GT | A2 B7 C8 G5 I6 I10 K5 L4 L6 L10 M5 M7 N1 N6 | Reject if below 4. |
| 47 | A1 B5 D3 E4 G2 J7 K4 L1 L6 L7 M4 M6 N2 N6 | Use Adapter WG-377A-5. |
| 48A8/UCL82 Triode Unit | A4 B5 C8 D1 G9 I6 I10 J2 K6 L1 M5 M7 N5 N6 | Depress Special Leakage/Gas Button in gas test. |
| 48A8/UCL82 Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I10 J7 K3 L1 L6 L7 M5 M7 N5 N6 | |
| 50A5 | A1 B8 C7 D6 E3 G2 I6 I10 J9 K1 L1 L6 L7 M5 M7 N5 N6 | |
| 50B5 | A3 B4 C2 D1 E6 G5 I6 I10 J9 K2 L1 L6 L7 M5 M7 N5 N6 | |
| 50BK5 | A4 B5 C6 D3 E8 G1 I6 I10 J5 K3 L1 L6 L7 M5 M7 N5 N6 | |
| 50BM8/UCL82 Triode Unit | A4 B5 C8 D1 G9 J2 K7 L1 M5 M7 N5 N6 | Depress Special Leakage/Gas Button in gas test. |
| 50BM8/UCL82 Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I7 J1 K4 L1 L6 L7 M5 M7 N5 N6 | |
| 50C5 | A3 B4 C1 D2 E6 G7 I6 I10 J9 K2 L1 L6 L7 M5 M7 N5 N6 | |
| 50C6G, GA | A2 B7 C8 D5 E4 G3 I6 I10 J10 K3 L1 L6 L7 M4 M7 N5 N6 | |
| 50CA5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J5 K1 L1 L6 L7 M5 M7 N5 N6 | |
| 50CD6G | A2 B7 C3 D5 E8 G10 I6 I7 J10 K5 L1 L6 L7 M4 M7 N5 N6 | |
| 50DC4 | A3 B4 C7 G5 I6 I10 K6 L4 L6 L10 M5 M7 N5 N6 | Reject if below 4. |
| 50EH5 | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M5 M7 N5 N6 | |
| 50FE5 | A2 B7 C8 D5 E4 G3 I6 I8 J1 K3 L1 L6 L7 M5 M7 N5 N6 | |
| 50FY8 Triode Unit | A4 B5 C8 D1 G9 J2 K5 L1 M5 M7 N5 N6 | Depress Special Leakage/Gas Button in gas test. |
| 50FY8 Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I10 J1 L1 L6 L7 M5 M7 N5 N6 | |
| 50L6GT | A2 B7 C8 D5 E4 G3 I6 I10 J9 K7 L1 L6 L8 M5 M7 N5 N6 | |
| 50X6 | A1 B8 C2 C7 F3 G6 I6 I10 K7 L4 L6 L10 M5 M7 N5 N6 | Test P1 and P2. Reject if below 4. |
| 50Y6GT | A2 B7 C4 C8 F3 G5 I6 I10 K7 L4 L6 L10 M5 M7 N5 N6 | Test P1 and P2. Reject if below 4. |
| 50Y7GT | A2 B7 C4 C8 F3 G5 I6 I10 K7 L4 L6 L10 M5 M7 N5 N6 | Test P1 and P2. Reject if below 4. |
| 53 | A1 B7 C4 D3 D5 F2 G6 I6 I10 J4 K7 L1 M4 M6 N2 N6 | Test P1 and P2. |
| 56 | A1 B5 C4 D3 G2 I6 I10 J8 K8 L1 M4 M6 N2 N6 | |
| 58 | A1 B6 C4 C5 D10 E3 G2 I6 I10 J6 K6 K7 L1 M4 M6 N2 N6 | |
| 60E3 | A3 B4 C7 G5 I6 I10 K5 L4 L6 L10 M5 M9 N5 N7 | Reject if below 4. |
| 70L7 Diode Unit | A2 B7 C1 G8 I6 I10 K6 L1 L4 L6 L10 M5 M10 N5 N7 | Reject if below 4. |
| 70L7 Pentode Unit | A2 B7 C6 D5 E4 G3 I6 I7 J1 K4 L1 L6 L7 M5 M10 N5 N7 | |
| 75 Diode Unit | A1 B6 C5 F3 G4 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 75 Triode Unit | A1 B6 C5 D10 G2 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 76 | A1 B5 C4 D3 G2 I6 I10 J8 K8 L1 M5 M10 N2 N9 | |
| 78 | A1 B6 C4 C5 D10 E3 G2 I6 I10 J2 K7 L1 M5 M10 N2 N9 | |
| 80 | A4 B1 F2 G3 K5 L5 L6 L10 M3 M10 N1 N9 | Test P1 and P2. Reject if below 4. |
| 83V | A1 B4 F2 G3 K7 L4 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 84/6Z4 | A1 B5 C4 F2 G3 K7 L4 L6 L9 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 85 Triode Unit | A1 B6 C5 D10 G2 I6 I10 J9 K9 L1 M5 M10 N2 N9 | |
| 85 Diode Unit | A1 B6 C5 F3 G4 I6 I10 K10 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 101F | A2 B3 D1 G4 J9 K6 L1 L6 L7 M4 M6 N1 N6 | Use WG-337A-4 Adapter. Key tube to put locating pin between large socket pins. |
| 117L7/M7GT Diode Unit | A2 B7 C1 G6 I6 I10 K4 L4 L6 L10 M4 M10 N2 N6 | Reject if below 4. |
| 117L7/M7GT Pentode Unit | A2 B7 C8 D4 E5 G3 I6 I10 J8 K9 L1 L6 L8 M4 M10 N2 N6 | |
| 117N7GT Pentode Unit | A7 B2 C6 D4 E5 E8 G3 J8 K4 L6 L9 M4 M10 N2 N6 | Reject if below 4. |
| 117N7GT Diode Unit | A2 B7 G8 K4 L4 L6 L10 M4 M10 N2 N6 | Reject if below 4. |
| 117P7GT Diode Unit | A2 B7 G8 K4 L4 L6 L10 M4 M10 N2 N6 | Reject if below 4. |
| 117P7GT Pentode Unit | A2 B7 C6 D4 E5 G3 I6 I10 J8 K9 L1 L6 L8 M4 M10 N2 N6 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 117Z3 | A3 B4 C6 G5 I6 I10 K7 L4 L6 L10 M4 M10 N2 N6 | Reject if below 4. |
| 117Z6GT | A2 B7 C4 C8 F3 G5 I6 I10 K6 L4 L6 L10 M4 M10 N2 N6 | Test P1 and P2. Reject if below 4. |
| 272A | A1 B5 C4 D3 G2 J9 K7 K10 L1 M5 M10 N5 N9 | Use WG-337A-5 Adapter. |
| 274A | A1 B4 F3 G2 K5 L5 L6 L10 M4 M10 N1 N9 | Use WG-337A-4 Adapter. Test P1 and P2. Reject if below 3. |
| 300B | A1 B4 D3 G2 J10 K6 L1 L6 L8 M4 M10 N1 N9 | Use WG-337A-4 Adapter. |
| 310A | A1 B6 C4 C5 D10 E3 G2 I6 I10 J5 K6 L1 M5 M10 N5 N9 | Use WG-337A-6 Adapter. |
| 328A | A1 B6 C4 C5 D10 E3 G2 I6 I10 J5 K5 K6 L1 M3 M10 N2 N9 | Use WG-337A-6 Adapter. |
| 329A | A1 B5 C4 D10 E3 G2 I6 I10 J10 K1 L1 M3 M10 N2 N9 | Use WG-337A-5 Adapter. |
| 352A Triode Unit | A1 B6 C5 D10 G2 I6 I10 J6 K9 L1 M5 M10 N5 N9 | Use WG-337A-6 Adapter. |
| 352A Diode Unit | A1 B6 C5 F4 G3 I6 I10 K10 L3 M5 M10 N5 N9 | Test P1 and P2. Reject if below 3. Use WG-337A-6 Adapter. |
| 404A | See 5847 Card. | |
| 417A | See 5842 Card. | |
| 418A | A1 B6 C4 D8 E5 G2 I6 I10 J3 K6 L1 L6 L9 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 807 | A1 B5 C4 D3 E2 G10 I6 I10 J9 K6 L1 L6 L7 M3 M10 N1 N9 | |
| 837 | A1 B2 B5 B7 C6 D4 E3 G10 I6 I10 J8 K7 L1 L6 L7 M2 M10 N3 N9 | |
| 1203A | Same as 7C4. | |
| 1612 | Use 6L7 Card. | |
| 1614 | Use 6L6G Card. | |
| 1620 | Use 6J7 Card. | |
| 1621 | Use 6F6 Card. | |
| 1622 | Use 6L6 Card. | |
| 1634 | Use 12SC7 Card. | |
| 1635 | A2 B7 C8 D4 D5 F3 G6 I6 I10 J1 K8 K9 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 1644 | Use 12L8 Card. | |
| 1853 | See 6AB7/1853. | |
| 5591 | Use 6AK5 Card. | |
| 5608A | A1 B7 C4 D3 D5 F2 G6 J1 K4 L1 M4 N6 N2 N6 | Test P1 and P2. |
| *5618 | A7 B1 C4 D6 E3 G2 I6 I10 J9 K6 L1 L6 L8 M4 M10 N2 N9 | |
| 5639 | A3 B6 C2 D1 E7 G5 I7 I9 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 5642 | A1 B2 G10 K8 K9 L4 M2 M6 N1 N6 | Reject if below 3. |
| 5651 | A8 G1 K1 L1 M5 M10 N5 N9 | Use WG-324A Adapter. |
| 5654 | Use 6AK5 Card. | |
| 5670 | A1 B5 B9 C2 C8 D3 D7 F4 G6 J1 K5 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 5672 | A3 B5 D4 E2 G1 J10 K9 K10 L5 M2 N6 N1 N6 | |
| 5676 | A2 B4 D3 G1 J7 K3 L1 M2 M6 N1 N6 | |
| 5678 | A5 B3 D4 E2 G1 J6 K9 L5 M2 M6 N1 N6 | Reject if below 3. |
| 5679 | Use 7A6 Card. | |
| 5686 | A4 B5 C1 C3 D2 E6 G7 I6 I10 J8 K3 K4 L1 M5 M10 N2 N9 | |
| 5687 | A4 A5 B8 C3 C6 D2 D7 F1 G9 I6 I10 J4 K6 L1 L6 L8 M3 M10 N1 N9 | Test P1 and P2. |
| 5691 | Use 6SL7 Card. | |
| 5692 | Use 6SN7 Card. | |
| 5693 | Use 6SJ7 Card. | |
| 5702 | A3 B4 C5 C6 D7 E2 G1 I7 I8 J1 K5 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 5703 | A3 B4 C6 D5 G1 I9 I10 J1 K5 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 5718 | A3 B6 C2 C4 C5 C7 D1 G8 I6 I7 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 5725 | Use 6AS6 Card. | |
| 5726 | Use 6AL5 Card. | |
| 5732 | Use 6K7 Card. | |
| 5749 | Use 6BA6 Card. | |
| 5750 | Use 6BE6 Card. | |
| 5751 | Use 12AX7 Card. | |
| 5763 | A4 B5 C3 C7 D8 E6 G1 I6 I10 J6 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 5814A | Use 12AU7 Card. | |
| 5824 | Use 25B6 Card. | |
| 5829 | A3 B4 B5 C2 C7 F1 G6 I6 I10 K8 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 5842/417A | A3 B9 C6 D4 G1 I7 I9 J1 K4 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 5844 | A3 B4 C7 D5 D6 F2 G1 J2 K10 L1 L6 L8 M5 M10 N2 N9 | Test P1 and P2. |
| 5847/E182F/404A | A9 B3 C4 D1 E8 G6 I8 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 5871 | Use 6V6 Card. | |
| 5879 | A4 B5 C3 C9 D1 E7 G8 I6 I10 J6 K8 L1 M5 M10 N2 N9 | |
| 5881 | Use 6L6 Card. | |
| 5886 | A3 B4 D6 E2 G1 J6 K10 L2 M5 M6 N1 N6 | Use Adapter WG-338A. Start Red Dot end at P1. Normal Gm = 1.4. |
| 5896 | A3 B4 B6 C2 C7 F1 G5 I6 I10 K7 K8 L2 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 5897 | Use 5718 Card. | |
| 5899 | A3 B6 C2 D1 E7 G5 I9 I10 J1 K7 K8 L1 L6 L7 M5 M10 N2 N9 | |
| 5902 | A3 B6 C2 D1 E7 G5 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 5910 | Use 1U4 Card. | |
| 5915 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J6 K5 K6 L1 M5 M10 N2 N9 | |
| 5930 | Use 2A3 Card. | |
| 5931 | Use 5U4G Card. | |
| 5932 | Use 6L6G Card. | |
| 5961 | Use 6SA7 Card. | |
| 5963 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J1 K6 K7 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |

*Indicates corrected punch data. Discard any punch information published previously on this tube-type.

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 5964 | A3 B4 C7 D5 D6 F1 G2 I7 I9 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 5965 | A4 B5 C3 C8 D2 D7 F6 G1 I6 I10 J4 K5 L1 L6 L7 M2 M10 N4 N9 | Depress Special Leakage/Gas Button In gas test. |
| 5971 | A3 B5 D2 D4 G1 J4 K6 K7 L1 L6 L7 M2 M6 N1 N6 | Use WG-338A Adapter. |
| 5992 | Use 6V6 Card. | |
| 5998 | A7 B8 C3 C6 D1 D4 F2 G5 I6 I7 J1 K8 L1 L6 L8 M4 M10 N2 N9 | Test P1 and P2. |
| 6005 | Use 6AQ5 Card. | |
| 6006 | Use 6SG7 Card. | |
| 6021 | A3 B6 C4 C5 D2 D7 F1 G8 I6 I8 J1 K4 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6028 | Use 6AK5 Card. | |
| 6046 | Use 25L6 Card. | |
| 6057 | Use 12AX7 Card. | |
| 6058 | Use 6AL5 Card. | |
| 6060 | Use 12AT7 Card. | |
| 6063 | Use 6X4 Card. | |
| 6066 | Use 6AT6 Card. | |
| 6067 | Use 12AU7 Card. | |
| 6072 | Use 12AY7 Card. | |
| S074 | Use 0B2 Card. | |
| 6080 | Use 6AS7G Card. | |
| 6087 | Use 5Y3-GT Card. | |
| 6088/12679/12680 | A5 B3 D4 E2 G1 J7 K10 L5 M2 M6 N1 N6 | |
| 6095 | Use 6AQ5 Card. | |
| 6096 | Use 6AK5 Card. | |
| 6097 | Use 6AL5 Card. | |
| 6098 | Use 6AR6 Card. | |
| 6099 | Use 6J6 Card. | |
| 6100 | Use 6C4 Card. | |
| 6101 | Use 6J6 Card. | |
| 6106 | Use 5Y3 Card. | |
| 6113 | Use 6SL7 Card. | |
| 6118 | Use 6Q7 Card. | |
| 6132 | Use 6CH6 Card. | |
| 6134 | Use 6AC7 Card. | |
| 6135 | Use 6C4 Card. | |
| 6136 | Use 6AU6 Card. | |
| 6146 | A2 B7 C1 D5 E3 G10 I9 I10 J1 K3 K4 L1 L6 L7 M3 M10 N1 N9 | |
| 6159 | A2 B7 C1 D5 E3 G10 I9 I10 J1 K3 K4 L1 L6 L7 M3 M10 N1 N8 | |
| 6180 | Use 6SN7 Card. | |
| 6186 | Use 6AG5 Card. | |
| 6187 | Use 6AS6 Data. | |
| 6188 | Use 6SU7 Card. | |
| 6189 | Use 12AU7 Card. | |
| 6197 | A4 B5 C1 C7 D2 E3 G6 I6 I10 J5 K6 L1 L6 L8 M3 M10 N1 N9 | |
| 6201 | Use 12AT7 Card. | |
| 6202 | Use 6X4 Card. | |
| 6211 | A4 B5 C3 C8 D2 D7 F6 G1 I6 I9 J2 K3 L1 L6 L7 M2 M10 N4 N9 | Test P1 and P2. |
| 6227 | A4 B5 C3 C9 D2 E8 G7 I7 I10 J1 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6265 | Use 6BH6 Card. | |
| 6267/EF86 | A4 B2 B5 B7 B8 C3 D9 E1 G6 I6 I9 J3 K5 K6 L1 M5 M10 N2 N9 | |
| 6293 | A2 B7 C1 D5 E3 G10 I9 I10 J1 K3 K4 L1 L6 L7 M3 M10 N1 N9 | |
| *6336 | A7 B8 C3 C6 D1 D4 F2 G5 I9 I10 J1 K6 L1 L6 L7 M3 M10 N2 N9 | Test P1 and P2. |
| 6350 | A4 A5 B9 C2 C7 D3 D8 F6 G1 I6 I10 J6 K5 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6360/QQV03-10 | A4 B5 C2 D1 D3 E7 F8 G6 I6 I10 J10 K5 L1 M2 M10 N4 N9 | Test P1 and P2. |
| 6386 | A1 B5 B9 C2 C8 D3 D7 F4 G6 I6 I7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6397 | A1 B7 D8 E6 G3 J9 K5 K6 L1 L6 L7 M3 M6 N2 N6 | Use WG-339A Adapter. |
| 6463 | A4 B5 C2 C7 D3 D8 F1 G6 J1 K3 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |
| 6485 | Use 6AH6 Card. | |
| 6550 | A2 B7 C1 C8 D5 E4 G3 I6 I10 J9 K8 L1 L6 L8 M4 M10 N2 N9 | |
| 6627 | Use 0B2 Card. | |
| 6660 | Use 6BA6 Card. | |
| 6661 | Use 6BH6 Card. | |
| 6662 | Use 6BJ6 Card. | |
| 6663 | Use 6AL5 Card. | |
| 6664 | Use 6AB4 Data. | |
| 6669 | Use 6AQ5A Card. | |
| 6676 | Use 6CB6 Data. | |
| 6677 | Use 6CL6 Card. | |
| 6678 | Use 6U8A Card. | |
| 6679 | Use 12AT7 Card. | |
| 6680 | Use 12AU7 Card. | |
| 6681 | Use 12AX7 Card. | |
| 6883 | A2 B7 C1 D5 E3 G10 I9 I10 J1 K3 K4 L1 L6 L7 M2 M10 N4 N9 | |
| 6922 | Use 6DJ8 Card. | |
| 6927 | Use 6J6 Card. | |
| 6928 | Use 6AQ5 Card. | |
| 6939 | A4 B5 C2 D1 D3 E7 F8 G6 I7 I10 J1 K7 L1 L6 L8 M2 M10 N4 N9 | Test P1 and P2. |
| 6973 | A4 B5 C7 D3 E1 G9 I6 I10 J6 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6973 | A4 B5 C7 D3 E1 G9 I6 I10 J8 K6 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 7025 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Test P1 and P2. |
| 7027 | A2 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 7060 Triode Unit | A4 B5 B9 C3 D2 G1 I8 I10 J1 K5 K6 L1 L6 L7 M1 M10 N3 N9 | |
| 7060 Pentode Unit | A4 B5 C9 D8 E7 G6 I7 I10 J1 K2 L1 L6 L7 M1 M10 N3 N9 | |

*Indicates corrected punch data. Discard any punch information published previously on this tube-type.*

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 7189 | A4 B5 C3 D2 E9 G7 I6 I10 J5 K6 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 7199 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J7 K4 L1 M5 M10 N2 N9 | |
| 7199 Pentode Unit | A4 B5 C6 D7 E3 G2 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 7308 | Use 6DJ8 Data. | |
| 7543 | Use 6AU6 Card. | |
| 7543 | Use 6AU6 Data. | |
| 7586 | A3 B1 B5 C2 D6 G4 J1 K7 K8 L1 L6 L8 M5 M10 N2 N9 | Use Nuvistor Adapter WG-340A. |
| 7687 | Use 7199 Data. | |
| 7717 | Use 6CY5 Card. | |
| 7728 | Use 12AT7 Data. | |
| 7729 | Use 12AX7 Data. | |
| 7730 | Use 12AU7 Data. | |
| 7731 | Use 6U8 Data. | |
| 7732 | Use 6CE6 Data. | |
| 7733 | Use 12BY7 Data. | |
| 7803 | Use 6DJ8 Data. | |
| 9001 | A3 B4 C7 D1 E6 G5 J6 K7 K8 L1 M5 M10 N2 N9 | |
| 9002 | A3 B4 C2 D6 G1 I6 I10 J6 K5 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 9003 | A3 B4 C2 D1 E6 G5 I6 I10 J6 K5 K6 L1 M5 M10 N2 N9 | |
| 12679 | See 6088/12679/12680. | |
| 12680 | See 6088/12679/12680. | |

## CARD-PUNCH AND INTERCHANGEABILITY DATA FOR FOREIGN TUBE TYPES

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 1C1 | Use 1R5 Card. | |
| 1C2 | Use 1AC6 Card. | |
| 1D13 | Use 1A3 Card. | |
| 1F2 | Use 1L4 Card. | |
| 1F3 | Use 1T4 Card. | |
| 1FD9 | Use 1S5 Card. | |
| 1P10 | Use 3S4 Card. | |
| 1P11 | Use 3V4 Card. | |
| 6D2 | Use 6AL5 Card. | |
| 6H8 | Use 6B8 Card. | |
| 6M1 | Use 6U5 Card. | |
| 6P15 | Use 6BQ5 Card. | |
| 7D9 | Use 6AM5 Card. | |
| 8D3 | Use 6AM6 Card. | |
| 30P4 | Use 25E5 Card. | |
| 63ME | Use 6U5 Card. | |
| 85A2 | Use OG3 Card. | |
| 108C1 | Use OB2 Card. | |
| 150C2 | Use OA2 Card. | |
| 150C3 | Use OD3 Card. | |
| B36 | Use 12SN7 Card. | |
| B65 | Use 6SN7 Card. | |
| B152 | Use 12AT7 Card. | |
| B309 | Use 12AT7 Card. | |
| B329 | Use 12AU7 Card. | |
| B339 | Use 12AX7 Card. | |
| BPM04 | Use 6AQ5 Card. | |
| D63 | Use 6H6 Card. | |
| D77 | Use 6AL5 Card. | |
| D152 | Use 6AL5 Card. | |
| DA90 | Use 1A3 Card. | |
| DAC32 | Use 1H5 Card. | |
| DAF91 | Use 1S5 Card. | |
| DAF92 | Use 1U5 Card. | |
| DAF96 | Use 1AH5 Card. | |
| DCC90 | Use 3A5 Card. | |
| DD6 | Use 6AL5 Card. | |
| DDR7 | Use 6AM5 Card. | |
| DF33 | Use 1N5 Card. | |
| DF62 | Use 1AD4 Card. | |
| DF91 | Use 1T4 Card. | |
| DF92 | Use 1L4 Card. | |
| DF96 | Use 1AF4 Card. | |
| DF97 | Use 1AN5 Card. | |
| DF652 | Use 1AD4 Card. | |
| DF904 | Use 1U4 Card. | |
| DH63 | Use 6Q7 Card. | |
| DH77 | Use 6AT6 Card. | |
| DH149 | Use 7C6 Card. | |
| DH719 | Use 6T8 Card. | |
| DK32 | Use 1A7 Card. | |
| DK91 | Use 1R5 Card. | |
| DK92 | Use 1AC6 Card. | |
| DK96 | Use 1AB6 Card. | |
| DL33 | Use 3Q5 Card. | |
| DL35 | Use 1C5 Card. | |
| DL36 | Use 1Q5 Card. | |
| DL91 | Use 1S4 Card. | |
| DL92 | Use 3S4 Card. | |
| DL93 | Use 3A4 Card. | |
| DL94 | Use 3V4 Card. | |
| DL95 | Use 3Q4 Card. | |
| DL96 | Use 3C4 Card. | |
| DL98 | Use 3B4 Card. | |
| DL620 | Use 5672 Card. | |
| DM70 | Use 1M3 Card. | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| DP61 | Use 6AK5 Card. | |
| DY30 | Use 1B3 Card. | |
| DY80 | Use 1X2 Card. | |
| DY87 | Use 1S2 Card. | |
| E88CC | Use 6DJ8 Card. | |
| E90F | Use 6BH6 Card. | |
| E95F | Use 6AK5 Card. | |
| E99F | Use 6BJ6 Card. | |
| E180F | A4 B5 C1 C3 C8 D2 E9 G7 I7 I10 J1 K6 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| E182F | Use 5847 Card. | |
| EAA91 | Use 6AL5 Card. | |
| EABC80 | Use 6T8 Card. | |
| EAF42 | Use 6CT7 Card. | |
| EB34 | Use 6H6 Card. | |
| EB91 | Use 6AL5 Card. | |
| EBC33 Triode Unit | A2 B7 C1 C8 D10 G3 J4 K6 L1 M5 M10 N2 N9 | |
| EBC33 Diode Unit | A2 B7 C1 C8 F5 G4 K6 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| EBC41 | Use 6CV7 Card. | |
| EBC80 | Use 6BD7 Card. | |
| EBC90 | Use 6AT6 Card. | |
| EBC91 | Use 6AV6 Card. | |
| EBF32 | Use 6B8 Card. | |
| EBF80 | Use 6N8 Card. | |
| EBF83 | Use 6DR8 Card. | |
| EBF89 | Use 6DC8 Card. | |
| EC70 | Use 6K4 Card. | |
| EC80 | Use 6Q4 Card. | |
| EC81 | Use 6R4 Card. | |
| EC84 | Use 6AJ4 Card. | |
| EC90 | Use 6C4 Card. | |
| EC91 | Use 6AQ4 Card. | |
| EC92 | Use 6AB4 Card. | |
| EC93 | Use 6BS4 Card. | |
| EC94 | Use 6AF4 Card. | |
| EC95 | Use 6ER5 Card. | |
| ECC32 | Use 6SN7 Card. | |
| ECC33 | A7 B8 C3 C6 D1 D4 F2 G5 J2 K2 L1 M5 M10 N2 N9 | Test P1 and P2. |
| ECC35 | A7 B8 C3 C6 D1 D4 F2 G5 J3 K8 L1 M5 M10 N2 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| ECC81 | Use 12AT7 Card. | |
| ECC82 | Use 12AU7 Card. | |
| ECC83 | Use 12AX7 Card. | |
| ECC84 | Use 6CW7 Card. | |
| ECC85 | Use 6AQ8 Card. | |
| ECC86 | Use 6GM8 Card. | |
| ECC88 | Use 6DJ8 Card. | |
| ECC91 | Use 6J6 Card. | |
| ECC189 | Use 6ES8 Card. | |
| ECF82 | Use 6U8 Card. | |
| ECH42 | Use 7J7 Card. | |
| ECH80 | Use 6AN7 Card. | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| ECH81 | Use 6AJ8 Card. | |
| ECH83 | Use 6DS8 Card. | |
| ECL80 | Use 6AB8 Card. | |
| ECL82 | Use 6BM8 Card. | |
| EF22 | Use 7G7 Card. | |
| EF40 | A1 B8 C4 C7 D5 E6 G2 J4 K7 K8 L1 M5 M10 N2 N9 | Use Special Socket Adapter. |
| EF80 | Use 6BX6 Card. | |
| EF81 | Use 6BH5 Card. | |
| EF85 | Use 6BY7 Card. | |
| EF86 | Use 6CF8 Card. | |
| EF89 | Use 6DA6 Card. | |
| EF91 | Use 6AM6 Card. | |
| EF92 | Use 6CQ6 Card. | |
| EF93 | Use 6BA6 Card. | |
| EF94 | Use 6AU6 Card. | |
| EF95 | Use 6AK5 Card. | |
| EF96 | Use 6AG5 Card. | |
| EF98 | Use 6ET6 Card. | |
| EF804 | A4 B1 B2 B5 C3 D9 E8 G7 I6 I10 J3 K4 K5 L1 M5 M10 N2 N9 | |
| EH90 | Use 6CS6 Card. | |
| EK90 | Use 6BE6 Card. | |
| EL22 | Use 7B5 Card. | |
| EL33 | Use 6AG6 Card. | |
| EL34 | Use 6CA7 Card. | |
| EL35 | Use 6L6 Card. | |
| EL36 | Use 6CM5 Card. | |
| EL37 | A2 B7 C8 D5 E4 G3 I8 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| EL38 | A2 B7 C8 D5 E4 G10 I8 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| EL41 | Use 6CK5 Card. | |
| EL80 | Use 6M5 Card. | |
| EL81 | Use 6CJ6 Card. | |
| EL83 | Use 6CK6 Card. | |
| EL84 | Use 6BQ5 Card. | |
| EL85 | Use 6BN5 Card. | |
| EL86 | Use 6CW5 Card. | |
| EL90 | Use 6AQ5 Card. | |
| EL91 | Use 6AM5 Card. | |
| EL95 | Use 6DL5 Card. | |
| EL821 | Use 6CH6 Card. | |
| EM34 | Use 6CD7 Card. | |
| EM35 | Use 6U5 Card. | |
| EM80 | Use 6BR5 Card. | |
| EM81 | Use 6DA5 Card. | |
| EQ80 | Use 6BE7 Card. | |
| EY51 | Use 6X2 Card. | |
| EY80 | Use 6U3 Card. | |
| EY81 | Use 6R3 Card. | |
| EY86 | Use 6S2 Card. | |
| EZ35 | Use 6X5 Card. | |
| EZ40 | Use 6BT4 Card. | |
| EZ80 | Use 6V4 Card. | |
| EZ81 | Use 6CA4 Card. | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| EZ90 | Use 6X4 Card. | |
| FW4/800 | A3 B4 F2 G1 K2 L5 L6 L10 M5 M6 N1 N6 | Test P1 and P2. Reject if below 4. Use Special Socket Adapter. |
| GZ30 | Use 5Z4 Card. | |
| GZ31 | Use 5U4 Card. | |
| GZ32 | Use 5V4 Card. | |
| GZ34 | Use 5AR4 Card. | |
| H63 | Use 6F5 Card. | |
| HBC90 | Use 12AT6 Card. | |
| HBC91 | Use 12AV6 Card. | |
| HD30 | Use 3B4 Card. | |
| HF93 | Use 12BA6 Card. | |
| HF94 | Use 12AU6 Card. | |
| HK90 | Use 12BE6 Card. | |
| HL90 | Use 19AQ5 Card. | |
| HL92 | Use 50C5 Card. | |
| HM04 | Use 6BE6 Card. | |
| HY90 | Use 35W4 Card. | |
| KT32 | Use 25L6 Card. | |
| KT61 | Use 6AG6 Card. | |
| KT63 | Use 6F6 Card. | |
| KT66 | A2 B1 B7 C8 D5 E4 G3 I6 I10 J9 K6 L1 L6 L7 M4 M10 N2 N9 | |
| KT88 | A2 B7 C8 D5 E4 G3 I6 I10 J4 K6 L1 L6 L8 M4 M10 N2 N9 | |
| KTW63 | Use 6K7 Card. | |
| KTZ63 | Use 6J7 Card. | |
| L63 | Use 6J5 Card. | |
| L77 | Use 6C4 Card. | |
| M8080 | Use 6C4 Card. | |
| M8081 | Use 6J6 Card. | |
| M8100 | Use 6AK5 Card. | |
| M8136 | Use 12AU7 Card. | |
| M8212 | Use 6AL5 Card. | |
| M8232 | Use 6J4 Card. | |
| M8245 | Use 6AQ5 Card. | |
| N17 | Use 3S4 Card. | |
| N18 | Use 3Q4 Card. | |
| N19 | Use 3V4 Card. | |
| N77 | Use 6AM5 Card. | |
| N78 | Use 6BJ5 Card. | |
| N147 | Use 6AG6 Card. | |
| N727 | Use 6AQ5 Card. | |
| PABC80 | Use 9AK8 Card. | |
| PCC84 | Use 7AN7 Card. | |
| PCC85 | Use 9AQ8 Card. | |
| PCC88 | Use 7DJ8 Card. | |
| PCF80 | Use 9A8 Card. | |
| PCF82 | Use 9U8 Card. | |
| PCL82 | Use 16A8 Card. | |
| PCL84 | Use 15DQ8 Card. | |
| PL36 | Use 25E5 Card. | |
| PL81 | Use 21A6 Card. | |
| PL82 | Use 16A5 Card. | |
| PL83 | Use 15A6 Card. | |
| PY80 | Use 19X3 Card. | |
| PY81 | Use 17Z3 Card. | |
| PY82 | Use 19Y3 Card. | |
| QQV02-6 | Use 6939 Card. | |
| QQV03-10 | Use 6360 Card. | |
| QV03-12 | Use 5763 Card. | |
| QV05-25 | Use 807 Card. | |
| QV06-20 | Use 6146 Card. | |
| U50 | Use 5Y3 Card. | |
| U52 | Use 5U4 Card. | |
| UAF42 | Use 12S7 Card. | |
| UB91 | Use 12AL5 Card. | |
| UBC41 | Use 14L7 Card. | |
| UBF80 | Use 17C8 Card. | |
| UCH42 | Use 14K7 Card. | |
| UCH81 | Use 19AJ8 Card. | |
| UCL82 | Use 50BM8 Card. | |
| UL41 | Use 45A5 Card. | |
| UL84 | Use 45B5 Card. | |
| UF41 | Use 12AC5 Card. | |
| UF89 | Use 12DA6 Card. | |
| UQ80 | Use 12BE7 Card. | |
| UY41 | Use 31A3 Card. | |
| UY85 | Use 38A3 Card. | |
| W17 | Use 1T4 Card. | |
| X18 | Use 1AC6 Card. | |
| X79 | Use 6AE8 Card. | |
| X727 | Use 6BE6 Card. | |
| XC95 | Use 2ER5 Card. | |
| XCC189 | Use 4ES8 Card. | |
| XL84 | Use 8BQ5 Card. | |
| XXD | Use 7AF7 Card. | |
| Y61 | Use 6U5 Card. | |
| Y63 | Use 6U5 Card. | |
| Z14 | Use 1N5 Card. | |
| Z63 | Use 6J7 Card. | |
| Z719 | Use 6BX6 Card. | |
| ZD17 | Use 1S5 Card. | |

# ACCESSORIES

WG-324A Gas Tube Adapter ..... $2.95*

WG-325A Accessory Unpunched Cards ..... $2.25*

WG-326A Accessory Card Punch ..... $5.95*

WG-337A Tube Socket Adapter Set ..... $7.95*
(4-pin, 5-pin, 6-pin, 7-pin)

WG-338A Tube Socket Adapter ..... $2.95*
(7-lead in-line subminiature)

WG-339A Tube Socket Adapter ..... $3.50*
(8-lead circular subminiature)

WG-340A Nuvistor Triode Socket Adapter ..... $3.50*

*User Price (Optional)

Information furnished by RCA is believed to be accurate and reliable. However, no responsibility is assumed by RCA for its use; nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of RCA.

WALTHER BROS. COMPANY, INC.
1722 POYDRAS ST.
NEW ORLEANS 12, LA.

SEPTEMBER, 1965

PRICE 50 CENTS

Replaces all earlier Supplements

# SUPPLEMENT TO

# CARD PUNCH DATA BOOKLET FOR THE RCA WT-110A *AUTOMATIC* ELECTRON TUBE TESTER

**INCLUDES SEPARATE LIST OF DATA FOR TESTING THE NOVAR, COMPACTRON, AND 10-PIN TUBE TYPES (SEE PAGE 14).**

This card punch data is provided as an addition to the Card Punch Data Booklet 1CE-234, dated January, 1961, which is available through RCA Electronic Instrument Distributors. This Supplement replaces all earlier Supplements, and contains the latest punching information available as of the date of publication.

## CORRECTED PUNCHING DATA

In some copies of the Card Punch Data Booklet, the punching data for the following tube-types is in error. The data in the Booklet should be corrected to agree with the punching information shown below.

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 3BZ6 | A3 B4 B7 C2 D1 E6 G5 I7 I10 J1 K3 K4 L1 L6 L7 M2 M6 N4 N6 | |
| 3DG4 | A1 B3 F5 G7 K2 K3 L4 L6 L10 M4 M6 N1 N6 | Test P1 and P2. Reject if below 4. |
| 4BZ6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K5 K6 L1 L6 L7 M1 M6 N4 N6 | |
| 6AK8 Triode Unit | A4 B5 C7 D8 G9 J2 K7 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6AK8 Diode Unit 1 | A4 B5 C3 C7 G6 I6 I10 K8 L3 M5 M10 N2 N9 | Test P1 only. Reject if below 1. |
| 6AK8 Diode Unit 2 | A4 B5 C3 C7 F2 H1 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P2 and P3 only. Reject if below 3. |
| 6AU7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K4 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6BZ6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K5 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6ET6 | Correct F6 to read E6 | |
| 6F6 | Add L1 to Data. | |
| 7AU7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K4 L1 M4 M10 N2 N9 | Test P1 and P2. |
| 8CS7 | Add M5 hole to Triode Unit 2 Data | |
| 12AE6A Triode Unit | A3 B4 C2 D1 G7 I6 I10 J1 K6 K8 L2 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. For 12AE6 without suffix "A", reject if below 3.5. |
| 12AU7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K4 L1 M2 M10 N3 N9 | Test P1 and P2. |
| 12BZ6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K5 K6 L1 L6 L7 M2 M10 N4 N9 | |
| 12FX8 | Correct Heptode Data—Change B4 to read B5 | |
| 21A6 | Change 21A8/PL81 data to read 21A6/PL81. Remove 21A8/PL81 heading | |
| 32ET5 | A3 B4 C1 D2 E6 G7 I6 I10 J9 K4 L1 L6 L7 M2 M10 N3 N8 | |
| 35EH5 | A3 B4 C1 D2 E6 G7 I7 I10 J1 K6 L1 L6 L8 M1 M10 N5 N8 | |
| 50FY8 Triode Unit | A4 B5 C8 D1 G9 J2 K5 L1 M5 M7 N5 N6 | Depress Special Leakage/Gas Button in gas test. |
| 50FY8 Pentode Unit | A4 B5 C2 D3 E7 G6 I8 I10 J1 K2 L1 L6 L7 M5 M7 N5 N6 | |
| 5886 | A3 B4 D6 E2 G1 J6 K10 L2 M2 M6 N1 N6 | Use WG-338A Adaptor. Start red dot end at Pin 1. Normal GM = 1.4. |
| 6354 | A2 G1 K7 L1 L6 L9 M5 M7 N5 N6 | |
| DF96 | Correct listing to read, Use 1AJ4 Card. | |

RADIO CORPORATION OF AMERICA
ELECTRONIC COMPONENTS AND DEVICES
ELECTRONIC INSTRUMENTS HARRISON, NEW JERSEY

Trademark(s) ® Registered
Marca(s) Registrada(s)

Supplement 6 to ICE-234 8-65
Printed in U.S.A.

## NEW PUNCHING INFORMATION

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 1A4 | A1 B4 D10 E3 G2 J7 K3 L1 M3 M6 N2 N6 | Use WG-337A-4 Adaptor. |
| 1AU2 | A4 B5 G9 K9 L5 M2 M6 N1 N6 | Reject if below 2. |
| 1AU3 | A7 B2 G10 K10 L5 M1 M6 N2 N6 | Reject if below 3. |
| 1B4 | A1 B4 D10 E3 G2 J10 K9 L1 M3 M6 N2 N6 | Use WG-337A-4 Adaptor. |
| 1B5/25S Triode Unit | A1 B6 D5 G2 J6 K8 L1 M3 M6 N2 N6 | Use WG-337A-6 Adaptor. |
| 1B5/25S Diode Unit | A1 B6 F3 G4 K3 L4 M3 M6 N2 N6 | Use WG-337A-6 Adaptor. Test P1 and P2. Reject if below 3. |
| 1BC2 | A1 B5 G10 K5 L5 M2 M6 N1 N6 | Reject if below 3. |
| 1DY4 | A3 B4 C5 D2 D6 G1 G7 I6 I7 J1 K2 L1 L6 L7 M5 M6 N3 N6 | |
| 1H4G | A2 B7 D5 G3 J8 K3 K4 L1 M3 M6 N2 N6 | |
| 1K6 Tetrode Unit | A1 B6 D10 E5 G2 J7 K6 K8 L1 M3 M6 N2 N6 | Use WG-337A-6 Adaptor. |
| 1K6 Diode Unit | A1 B6 F3 G4 K9 L3 M3 M6 N2 N6 | Use WG-337A-6 Adaptor. Test P1and P2. Reject if below 1. |
| 1LF3 | Use 1LE3 Data. | |
| 2AV2 | A4 B5 G9 K9 L5 M5 M6 N3 N6 | |
| 2AZ2 | A1 B2 G10 K7 M3 M6 N2 N6 | Reject if below 3. |
| 2BA2 | A4 B5 G9 K10 L4 M5 M6 N3 N6 | |
| 2BJ2 | A1 B2 G10 K1 L5 M3 M6 N2 N6 | Reject if below 3. |
| 2CW4 | A3 B1 B5 C2 D6 G4 I6 I8 J1 K1 K2 L1 L6 L7 M3 M6 N2 N6 | Use Nuvistor Adaptor WG-340A. |
| 2DS4 | A3 B1 B5 C2 D6 G4 I6 I8 J1 K3 K4 L1 L6 L7 M3 M6 N2 N6 | Use Nuvistor Adaptor WG-340A. |
| 2DV4 | A2 B4 B8 C6 D5 D7 G1 G3 I6 I10 J5 K1 K3 L1 L6 L7 M3 M6 N2 N6 | Use 7-Pin Nuvistor Socket Adaptor (see last page). Depress Special Leakage/Gas Button in gas test. |
| 2DX4 | Use 2DY4 Data | |
| 2DY4 | A3 B4 C5 D2 D6 G1 G7 I6 I7 J1 K2 L1 L6 L7 M3 M6 N2 N6 | |
| 2DZ4 | A3 B4 C5 D2 D6 G1 G7 J1 K6 L1 L6 L7 M3 M6 N2 N6 | |
| 2E41 | Use 2E42 Data. | |
| 2E42 Diode Unit | A4 B6 G3 K10 L3 M2 M6 N1 N6 | Red mark at Pin 1 end. Reject if below 1.0. |
| 2E42 Pentode Unit | A4 B6 D5 E2 G1 J2 K10 L4 M2 M6 N1 N6 | Red mark at Pin 1 end. Reject if below 3.0. Depress Special Leakage/Gas Button in gas test. |
| 2FQ5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J3 K7 L1 L6 L8 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2FS5 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J1 K1 L1 L6 L7 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2GK5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K5 K6 L1 L6 L8 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2GU5 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K4 K5 L1 L6 L7 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2GW5 | A3 B4 B7 C5 D2 D6 G1 I6 I10 J2 K6 L1 L6 L8 M3 M6 N2 N6 | |
| 2HA5 | A3 B4 B6 C2 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2HK5 | A3 B4 B6 C2 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2HM5 | Use 2HA5 Data. | |
| 2HQ5 | A3 B4 C2 C6 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3HQ5 | A3 B4 C2 C6 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2HR8 | A4 B5 C2 C3 C7 C8 D9 E1 G6 I6 I10 J4 K7 L1 M3 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 2L2 | A1 B9 G10 K3 K4 L5 M3 M6 N2 N6 | Insert base leads into Pins 1 and 9 of 9-pin socket. Connect cap lead to cap of tube. |
| 3AW3 | Use 3A3 Data | |
| 3BX6 | A4 B5 C1 C3 C6 C9 D2 E8 G7 I6 I10 J2 K2 L1 L6 L7 M3 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3CA3 | A2 B7 G10 K4 K5 L5 M5 M6 N2 N6 | Reject if below 3. |
| 3DX4 | Use 3DY4 Data. | |
| 3DY4 | A3 B4 C5 D2 D6 G1 G7 I6 I7 J1 K2 L1 L6 L7 M4 M6 N2 N6 | |
| 3DZ4 | A3 B4 C5 D2 D6 G1 G7 J1 K6 L1 L6 L7 M4 M6 N2 N6 | |
| 3FQ5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J3 K7 L1 L6 L8 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3FS5 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J1 K1 L1 L6 L7 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3GK5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K5 K6 L1 L6 L8 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3GS8 | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J1 K7 L1 M4 M6 N2 N6 | Test P1 and P2. Reject if below 3. |
| 3GU5 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K4 K5 L1 L6 L7 M3 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3GW5 | A3 B4 B7 C5 D2 D6 G1 I6 I10 J2 K6 L1 L6 L8 M4 M6 N2 N6 | |
| 3HA5 | A3 B4 B6 C2 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3HK5 | A3 B4 B6 C2 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M4 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3HM5 | Use 3HA5 Data. | |
| 3HM6 | A4 B5 B9 C1 C3 D2 F8 G7 I7 I9 J1 K5 K8 L1 L6 L8 M4 M6 N2 N6 | |
| 3HS8 | A4 B5 B6 B9 C1 D7 E2 F3 G8 I6 I10 J2 K8 K9 L1 M4 M6 N2 N2 | Test P1 and P2. Reject if below 3. |
| 3HT6 | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J2 K10 L1 L6 L9 M4 M6 N2 N6 | |
| 3JC6 | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J1 K7 K10 L1 L6 L9 M5 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3JD6 | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J1 K6 K7 L1 L6 L8 M5 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| 3KF8 | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K6 L1 M4 M6 N2 N6 | Test P1 and P2. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| **4AV6** Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M4 M6 N1 N6 | Test P1 and P2. Reject if below 4. |
| **4AV6** Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M4 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4CM4** | A4 B5 C3 C7 D2 D6 D8 G1 G9 I6 I10 J2 K1 L1 L6 L7 M5 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4CK5** | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K5 K6 L1 L6 L8 M4 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4GJ7** Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J6 K6 K7 L1 L6 L8 M4 M6 N1 N6 | |
| **4GJ7** Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K6 K7 L1 L6 L8 M4 M6 N1 N6 | |
| **4GS8** | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J1 K7 L1 M4 M6 N1 N6 | Test P1 and P2. Reject if below 3. |
| **4GW5** | A3 B4 B7 C5 D2 D6 G1 I6 I10 J2 K6 L1 L6 L8 M4 M6 N1 N6 | |
| **4GX7** Triode Unit | A4 B5 C1 C3 D9 G3 I6 I10 J2 K2 L1 L6 L7 M4 M6 N1 N6 | |
| **4GX7** Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K8 L1 L6 L8 M4 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| •**4GZ5** | A3 B4 C1 D2 D5 E6 G7 I7 I9 J1 K6 K8 L1 L6 L8 M5 M10 N1 N9 | |
| **4HA5** | A3 B4 B6 C2 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M5 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4HG8** Triode Unit | A4 B5 C3 D6 G7 I6 I10 J6 K5 L1 L6 L7 M4 M6 N1 N6 | |
| **4HG8** Pentode Unit | A4 B5 C1 D2 E9 G8 I6 I10 J2 K6 K7 L1 L6 L8 M4 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4HK5** | A3 B4 B6 C2 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M5 M6 N2 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4HM5** | Use 4HA5 Data. | |
| **4HM6** | A4 B5 B9 C1 C3 D2 E8 G7 I7 I9 J1 K5 K8 L1 L6 L8 M4 M6 N1 N6 | |
| **4HQ5** | A3 B4 C2 C6 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M4 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4HR8** | A4 B5 C2 C3 C7 C8 D9 E1 G6 I6 I10 J4 K7 L1 M4 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4HS8** | A4 B5 B6 B9 C1 D7 E2 F3 G8 I6 I10 J2 K8 K9 L1 M4 M6 N1 N6 | Test P1 and P2. Reject if below 3. |
| **4HT6** | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J2 K10 L1 L6 L9 M4 M6 N1 N6 | |
| •**4JC6** | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J1 K7 K10 L1 L6 L9 M5 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4JD6** | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J1 K6 K7 L1 L6 L8 M5 M6 N1 N6 | Depress Special Leakage/Gas Button in gas test. |
| **4JK6** | A3 B4 B7 C2 D1 E6 G5 I7 I10 J1 K5 L1 L6 L8 M5 M6 N2 N6 | |
| **4JL6** | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K7 K8 L1 L6 L8 M5 M6 N2 N6 | |
| **4KF8** | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K6 L1 M4 M6 N1 N6 | Test P1 and P2. |
| **4KN8** | A4 B5 B9 C3 C8 D2 D7 F1 G6 I6 I10 J2 K4 K5 L1 L6 L8 M4 M6 N1 N6 | Test P1 and P2. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| **5AF4** | A3 B4 C5 D2 G1 I8 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| **5EW6** | A3 B4 B7 C2 D1 E6 G5 I7 I9 J1 K7 L1 L6 L8 M4 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| **5GJ7** Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J6 K6 K7 L1 L6 L8 M4 M10 N1 N9 | |
| **5GJ7** Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K6 K7 L1 L6 L8 M4 M10 N1 N9 | |
| **5GX6** Grid 1 Test | A3 B4 B7 C2 D1 E6 G5 J1 K6 L1 M5 M6 N1 N6 | |
| **5GX6** Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 J1 K10 L1 M5 M6 N1 N6 | Reject if below 3. |
| **5GX7** Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J2 K2 L1 L6 L7 M4 M10 N1 N9 | |
| **5GX7** Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K8 L1 L6 L8 M4 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| **5HB7** Triode Unit | A4 B5 C1 C3 D9 G8 I7 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| **5HB7** Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K5 L1 L6 L7 M5 M6 N1 N6 | |
| **5HG8** Triode Unit | A4 B5 C3 D6 G7 I6 I10 J6 K5 L1 L6 L7 M5 M10 N1 N9 | |
| **5HG8** Pentode Unit | A4 B5 C1 D2 E9 G8 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| **5JK6** | A3 B4 B7 C2 D1 E6 G5 I7 I10 J1 K5 L1 L6 L8 M5 M6 N1 N6 | |
| **5JL6** | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K7 K8 L1 L6 L8 M5 M6 N1 N6 | |
| **5KD8** Triode Unit | A4 B5 B7 C8 D9 G1 I6 I10 J2 K4 K5 L1 L6 L7 M4 M10 N1 N9 | |
| **5KD8** Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K5 L1 L6 L7 M4 M10 N1 N9 | |
| •**5KE8** Triode Unit | A4 B5 B7 C8 D9 G1 I7 I10 J1 K1 K2 L1 L6 L7 M4 M10 N1 N9 | |
| **5KE8** Pentode Unit | A4 B1 B5 C7 D2 E3 G6 I6 I9 J1 K5 K7 L1 L6 L8 M4 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| **5LJ8** Triode Unit | A4 B5 C3 C8 D1 G2 I7 I10 J1 K3 L1 L6 L7 M4 M10 N1 N9 | |
| **5LJ8** Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I6 I9 J1 K7 L1 L6 L8 M4 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| **5MB8** Triode Unit | A4 B5 B8 C3 D1 G2 I7 I10 J1 K4 L1 L6 L7 M4 M10 N1 N9 | |
| **5MB8** Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I9 J1 K7 L1 L6 L8 M4 M10 N1 N9 | |
| **6AE8** Triode Unit | A4 B1 B2 B5 B6 C3 D7 G8 I6 I10 J5 K6 K7 L1 M5 M10 N2 N9 | |
| **6AE8** Hexode Unit | A4 B5 B7 C3 D2 E1 G6 I6 I10 J5 K7 L1 M5 M10 N2 N9 | |
| **6AL3** | A4 B5 C10 G3 G8 G9 K2 K3 L4 L6 L9 M3 M10 N1 N9 | Reject if below 4. |
| **6AR7** Pentode Unit | A1 B8 C7 D10 E4 G3 I6 I10 J6 K4 K5 L1 M5 M10 N2 N9 | |
| **6AR7** Diode Unit | A1 B8 C7 F5 G6 K6 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| **6AU7** | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J5 K9 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |

• Indicates corrected data. Discard previous punching information.

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6AX7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6BD7/EBC 81 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J2 K6 K7 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6BD7/EBC 81 Diode Unit | A4 B5 C3 F8 G6 K3 L4 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6BF8 Diode Units 1, 2, 3 | A4 B5 C6 F8 G9 H7 I6 I10 K3 K4 L3 L6 L7 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 2. |
| 6BF8 Diode Units 4, 5, 6 | A4 B5 C6 F2 G3 H1 I6 I10 K3 K4 L3 L6 L7 M5 M10 N2 N9 | Test P1, P2 and P3. Reject if below 2. |
| 6BJ5 | A3 B4 C2 D1 E7 G5 I6 I10 J3 K3 L1 L6 L7 M3 M10 N1 N9 | |
| 6BK6 | Use 6AV6 Data. | |
| 6BL8 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6BL8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6BR3 | A4 B5 C10 G9 K8 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4. |
| 6BV7 Pentode Unit | A4 B5 C9 D8 E3 G2 I6 I10 J5 K2 L1 L6 L8 M5 M10 N2 N9 | |
| 6BV7 Diode Unit | A4 B5 C7 F1 G6 K4 K5 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 2. |
| 6BX8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I6 I10 J4 K2 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Use Special Leakage Test. |
| 6CM4 | A4 B5 C3 C7 D2 D6 D8 G1 G9 I6 I10 J2 K1 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6CR4 | A7 B8 C1 D1 D3 D4 D6 D9 G5 I6 I10 J2 K5 L1 L6 L8 M5 M10 N2 N9 | |
| 6CS5 | Use 6HD5 Data. | |
| 6DL4 | A4 B5 C2 D1 D3 D6 D7 D9 G8 I7 I9 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6DM4 | A7 B8 C3 G5 I6 I10 K6 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4. |
| 6DQ4 | Use 6AX4 Data. | |
| 6DR4 | A3 B4 C7 D6 G1 G5 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6DS4 | A3 B1 B5 C2 D6 G4 I6 I8 J1 K3 K4 L1 L6 L7 M5 M10 N2 N9 | Use Nuvistor WG-340A Adaptor. |
| 6DT4 | A7 B8 C3 G5 I6 I10 K5 L4 L6 L10 M4 M10 N2 N9 | Reject if below 4. |
| 6DV4 | A2 B4 B8 C6 D5 D7 G1 G3 I6 I10 J5 K1 K3 L1 L6 L7 M5 M10 N2 N9 | Use 7-Pin Nuvistor Socket Adaptor (see last page). Depress Special Leakage/Gas Button in gas test. |
| 6DX4 | Use 6DY4 Data. | |
| 6DX8 Triode Unit | A4 B5 B7 C3 D1 G2 I6 I10 J2 K8 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6DX8 Pentode Unit | A4 B5 C7 D8 E9 G6 I6 I10 J3 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6DY4 | A3 B4 C5 D2 D6 G1 G7 I6 I7 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6DZ4 | A3 B4 C5 D2 D6 G1 G7 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6E7 | A1 B7 C4 C6 D10 E3 G2 I6 I10 J6 K10 L1 L6 L7 M5 M10 N2 N9 | Use WG-337A-7 Adaptor. |
| 6EC7 | A4 B5 C1 C3 C6 C9 D2 E8 G7 I6 I10 J3 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6EL7 | A4 B5 B6 C1 C3 C9 D2 E8 G7 I7 I9 J1 K1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6ES6 | A3 B4 C2 C7 D1 G5 G6 I6 I10 J6 K7 K10 L2 M5 M10 N2 N9 | |
| 6ET7 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K10 L1 L6 L9 M3 M10 N1 N9 | |
| 6ET7 Diode Unit | A4 B5 C1 F2 G3 K3 K4 L4 M3 M10 N1 N9 | Test P1 and P2. Reject if below 3. |
| 6EW7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M3 M10 N1 N9 | |
| 6EW7 Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K3 L1 L6 L7 M3 M10 N1 N9 | |
| 6F18 | Use 6EC7 Data. | |
| 6FC7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I8 J1 K3 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 6FD6 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K6 L2 M5 M10 N2 N9 | |
| 6FN5 | A2 B7 C3 C6 D4 D5 E1 E8 G10 I7 I10 J1 K5 K7 L1 L6 L8 M4 M10 N2 N9 | |
| 6FQ5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J3 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6FQ7 | Use 6CG7 data | |
| 6FR7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K6 K7 L1 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6FR7 Triode Unit 2 | A4 B5 C9 D2 D3 G1 I6 I10 J10 K4 L1 L6 L7 M3 M10 N1 N9 | |
| 6FS5 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6GA8 | A4 B5 C3 C8 C9 D2 D7 F1 G6 I6 I10 J7 K2 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6GC5 | A4 B5 C7 D3 D6 E1 E8 G9 I6 I7 J1 K8 L1 L6 L8 M3 M10 N1 N9 | |
| 6GD7 Triode Unit | A4 B5 C3 C8 D1 G2 I6 I10 J2 K5 K7 L1 L6 L8 M5 M10 N2 N6 | |
| 6GD7 Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I7 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6GJ7 Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J6 K6 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6GJ7 Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6GK5 | A3 B4 B6 C1 C7 D2 G5 I6 I10 J2 K5 K6 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6GL7 Triode Unit 1 | A7 B8 C8 D4 G5 I6 I10 J2 K6 K7 L1 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6GL7 Triode Unit 2 | A7 B8 C3 D1 G2 I6 I10 J10 K5 K6 L1 L6 L7 M3 M10 N1 N9 | |
| 6GM5 | A4 B5 C7 D6 E1 G9 I6 I10 J5 K2 L1 L6 L7 M3 M10 N1 N9 | |
| 6GM8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I10 J1 K8 L2 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6GQ7 | A4 B5 C1 C7 C9 F6 G8 H2 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Test P1, P2 and P3. Reject if below 4. |
| 6GS8 | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J1 K7 L1 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6GU5 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J2 K4 K5 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6GU7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J7 K8 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6GV8 Triode Unit | A4 B5 C3 C8 D2 G1 I6 I10 J2 K4 K5 L1 L6 L7 M3 M10 N1 N9 | |
| 6GV8 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J9 K1 K3 L1 L6 L7 M3 M10 N1 N9 | |
| 6GW5 | A3 B4 B7 C5 D2 D6 G1 I6 I10 J2 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6GW8 Triode Unit | A4 B5 C2 D1 G9 I6 I10 J2 K9 K10 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6GW8 Pentode Unit | A4 B5 C7 D8 E3 G6 I6 I10 J5 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6GX6 Grid 1 Test | A3 B4 B7 C2 D1 E6 G5 J1 K6 L1 M5 M10 N2 N9 | |
| 6GX6 Grid 3 Test | A3 B1 B4 C2 D7 E6 G5 J1 K10 LI M5 M10 N2 N9 | Reject if below 3. |
| 6GX7 Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6GX7 Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K8 LI L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6GY6 | Use 6GX6 data. | |
| 6GY8 | A5 B4 C1 C3 C7 C8 F9 G6 H2 I6 I10 K4 K5 L5 M5 M10 N2 N9 | Test P1 - P2 - P3. Reject if below 3. Shows Short on K. Emission Test Only. |
| 6GZ5 | A3 B4 C1 D2 D5 E6 G7 I7 I9 J1 K6 K8 L1 L6 L8 M5 M10 N2 N9 | |
| 6HA5 | A3 B4 B6 C2 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6HA6 | A4 B3 B5 B9 C1 D2 E6 E8 G7 I7 I10 J1 K5 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6HB6 | A4 B3 B5 B9 C1 D2 E8 G7 I6 I9 J1 K3 K4 L1 L6 L8 M3 M10 N1 N9 | |
| 6HB7 Triode Unit | A4 B5 C1 C3 D9 G8 I7 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6HB7 Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6HC8 Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I10 J9 K7 L1 L6 L7 M4 M10 N2 N9 | |
| 6HC8 Triode Unit | A4 B2 B5 C8 D1 G9 I6 I10 J3 K5 K6 L1 M4 M10 N2 N9 | Reject if below 3. Depress Special Leakage/Gas Button in gas test. |
| 6HF8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K7 K8 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6HF8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6HG5 | A3 B4 C2 D1 E6 G5 I6 I10 J8 K8 L1 L6 L7 M5 M10 M2 N9 | |
| 6HG8 Triode Unit | A4 B5 C3 D6 G7 I6 I10 J6 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6HG8 Pentode Unit | A4 B5 C1 D2 E9 G8 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6HJ8 Pentode Unit | A4 B5 B9 C1 D2 E3 G6 I7 I10 J1 K7 K8 L1 L6 L8 M5 M10 N2 N9 | |
| 6HJ8 Diode Unit | A4 B5 B9 C7 G8 I6 I10 K6 K7 L3 L6 L8 M5 M10 N2 N9 | Reject if below 3. |
| 6HK5 | A3 B4 B6 C2 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6HL8 Triode Unit | A4 B5 B7 C8 D9 G1 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6HL8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6HM5 | Use 6HA5 Data. | |
| 6HM6 | A4 B5 B9 C1 C3 D2 E8 G7 I7 I9 J1 K5 K8 L1 L6 L8 M5 M10 N2 N9 | |
| 6HQ5 | A3 B4 C2 C6 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6HQ6 | A3 B4 B7 C2 D1 E6 G5 I7 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6HR6 | A3 B2 B4 C7 D1 E6 G5 I7 I10 J1 K2 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6HS6 | A3 B2 B4 C7 D1 E6 G5 I8 I10 J1 K2 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6HS8 | A4 B5 B6 B9 C1 D7 E2 F3 G8 I6 I10 J2 K8 K9 L1 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6HT6 | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J2 K10 L1 L6 L9 M5 M10 N2 N9 | |
| 6HU6 | A4 B5 C3 D1 E6 F7 G9 I6 I10 J5 K8 L1 M5 M10 N2 N9 | P1—Test triode quality. Eye ½ open. P2—Eye completely closed. |
| 6HU8 | A4 B5 C7 D2 D6 E1 E9 F8 G3 I8 I10 J1 K5 K7 L1 L6 L7 M3 M10 N1 N9 | Test P1 and P2. |
| 6HW8 Deflection Plate 1 | A4 B5 C1 C7 D6 E3 E9 F2 G8 I6 I9 J1 K9 L1 M5 M10 N2 N9 | Reject if below 2 on P1. Reject if above 0 on P2. |
| 6HW8 Deflection Plate 2 | A4 B5 C7 C9 D6 E1 E3 F8 G2 I6 I9 J1 K9 L1 M5 M10 N2 N9 | Reject if below 2 on P1. Reject if above 0 on P2. |
| 6HZ6 | A3 B4 B7 C2 D1 E6 G5 I8 I9 J1 K9 L1 L6 L7 M5 M10 N2 N9 | |
| 6HZ8 Triode Unit | A4 B5 C1 D2 G3 J1 K7 K8 L1 L6 L7 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6HZ8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K6 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 6JA8 Triode Unit | A4 B4 B6 C1 D2 G3 I6 I10 J3 K7 L1 L6 L7 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6JA8 Tetrode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J2 K5 L1 L6 L8 M3 M10 N1 N9 | |
| 6JC6 | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J1 K7 K10 L1 L6 L9 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6JC8 Triode Unit | A4 B5 C1 C7 D8 G9 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6JC8 Pentode Unit | A4 B5 C1 C7 D2 E3 G6 I6 I10 J2 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6JD6 | A4 B5 B9 C1 C3 D2 E8 G7 I7 I10 J1 K6 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6JE8 Triode Unit | A4 B5 C1 D2 G3 J1 K7 K8 L1 L6 L7 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6JE8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K1 L1 L6 L7 M3 M10 N1 N9 | |
| 6JG6 | A4 B5 C3 C6 D2 E1 E7 G9 I8 I10 J10 K8 L1 L6 L8 M3 M10 N1 N9 | |
| 6JH6 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6JH8 | A4 B1 B2 B5 C7 D6 E3 F8 G9 I8 I10 J1 K3 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6JK6 | A3 B4 B7 C2 D1 E6 G5 I7 K10 J1 K5 L1 L6 L8 M5 M10 N2 N9 | |
| 6JK8 Triode Unit 1 | A4 B5 B9 C8 D7 G6 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6JK8 Triode Unit 2 | A4 B5 B9 C3 D2 G1 I6 I10 J3 K7 K8 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6JL6 | A3 B4 B7 C2 D1 E6 G5 I6 I7 J1 K7 K8 L1 L6 L8 M5 M10 N2 N9 | |
| 6JL8 Triode Unit | A4 B5 C1 D2 G3 I8 I9 J1 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6JL8 Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J4 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 6JN8 Triode Unit | A4 B5 B8 C3 D1 G2 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6JN8 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6JT8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K6 K7 L1 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6JT8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 L1 L6 L8 M3 M10 N1 N9 | |
| 6JU8 Diode Units 1, 2 | A4 B5 B6 C3 C9 F2 G8 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6JU8 Diode Units 3, 4 | A4 B5 B6 C2 C8 F1 G7 I6 I10 K7 L3 L6 L8 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6JV8 Triode Unit | Use 6AW8 Triode Card. | |
| 6JV8 Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6JW6 | A4 B3 B5 B9 C1 D2 E6 E8 G7 I7 I10 J1 K3 L1 L6 L8 M5 M10 N2 N9 | |
| 6JW8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6JW8 Triode Unit | A4 B5 B7 C8 D9 G1 I6 I10 J2 K2 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6KA8 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J2 K1 K3 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6KA8 Pentode Unit Grid 1 Test | A4 B5 B7 C3 D6 E8 G9 I6 I7 J1 K4 K5 L1 M5 M10 N2 N9 | |
| 6KA8 Pentode Unit Grid 3 Test | A4 B5 B6 C3 D7 E8 G9 I6 I7 J1 K10 L1 M5 M10 N2 N9 | Reject if below 3. |
| 6KD8 Triode Unit | A4 B5 B7 C8 D9 G1 I6 I10 J2 K4 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6KD8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 6KE6 | A1 B9 C2 C4 D5 E3 G10 I7 I10 J10 K2 L1 L6 L7 M3 M10 N1 N9 | Connect cap lead to tube cap. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6KE8 Triode Unit | A4 B5 B7 C8 D9 G1 I7 I10 J1 K1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6KE8 Pentode Unit | A4 B1 B5 C7 D2 E3 G6 I6 I9 J1 K5 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6KF8 | A4 B5 C1 C6 C9 D7 E2 F3 G8 I6 I10 J3 K6 L1 M5 M10 N2 N9 | Test P1 and P2. |
| 6KL8 Diode Unit | A4 B5 B9 C3 G8 K3 L4 M5 M10 N2 N9 | Reject if below 1.0. |
| 6KL8 Pentode Unit | A4 B1 B5 B9 C3 D2 E6 G7 I8 I10 J1 K7 L1 L6 L7 M5 M10 N2 N9 | |
| 6KM8 Tetrode Unit | A4 B5 C6 D7 E8 F2 G9 H1 I6 I10 J2 K8 K9 L1 M5 M10 N2 N9 | Reject if below 4 on P1. Reject if below 2 on P2 and P3. |
| 6KM8 Diode Unit | A4 B5 C6 G3 K3 K4 L4 M5 M10 N2 N9 | Reject if below 2. |
| 6KN8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I6 I10 J2 K4 K5 L1 L6 L8 M5 M10 N2 N9 | Test P1 and P2. |
| 6KR8 Triode Unit | A4 B5 B6 C1 D2 G3 I7 I10 J1 K6 K8 L1 L6 L8 M5 M10 N2 N9 | |
| 6KR8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 K5 L1 L6 L8 M5 M10 N2 N9 | |
| 6KS8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K10 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6KS8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K10 L1 L6 L9 M5 M10 N2 N9 | |
| 6KT8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K8 L1 L6 L7 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6KT8 Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J2 K8 L1 L6 L8 M3 M10 N1 N9 | |
| 6KU8 Diode Unit | A4 B5 B6 C1 F2 G3 I6 I10 K1 L4 M3 M10 N1 N9 | Test P1 and P2. Reject if below 2. |
| 6KU8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 L1 L6 L8 M3 M10 N1 N9 | |
| 6KV8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K7 L1 L6 L7 M3 M10 N1 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6KV8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K5 L1 L6 L8 M3 M10 N1 N9 | |
| 6KZ8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6KZ8 Triode Unit | A4 B3 B5 C8 C9 G1 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6LB8 Triode Unit | A4 B5 B6 C1 D2 G3 I7 I10 J1 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 6LB8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 L1 L6 L8 M3 M10 N1 N9 | |
| 6LC8 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J2 K1 K3 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6LC8 Pentode Unit Grid 1 Test | A4 B3 B5 C7 D6 E8 G9 I6 I7 J1 K4 K5 L1 M5 M10 N2 N9 | |
| 6LC8 Pentode Unit Grid 3 Test | A4 B5 B6 C7 D3 E8 G9 I6 I7 J1 K10 L1 M5 M10 N2 N9 | Reject if below 3. |
| 6LE8 | A4 B5 C2 C3 C7 D9 E8 F1 G6 I6 I10 J5 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6LF8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K3 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6LF8 Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J4 K6 K8 L1 L6 L8 M5 M10 N2 N9 | |
| 6LJ8 Triode Unit | A4 B5 C3 C8 D1 G2 I7 I10 J1 K3 L1 L6 L7 M5 M10 N2 N9 | |
| 6LJ8 Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I6 I9 J1 K7 L1 L6 L8 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6LM8 Triode Unit | A4 B5 C7 C8 D9 G1 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6LM8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J4 K5 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6LN8 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K5 L1 L6 L7 M4 M10 N1 N9 | |
| 6LN8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M4 M10 N1 N9 | |
| 6LY8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K5 L1 L6 L8 M5 M10 N2 N9 | |
| 6LY8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K6 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6LX8 | Use 6JW8 Data. | |
| 6SZ7 Triode Unit | A7 B8 C3 C4 C5 D2 G6 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 6SZ7 Diode Unit | A7 B8 C3 F4 G5 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. |
| 6ZY5 | Use 6X5 Data. | |
| 7ED7 | A4 B5 C1 C3 C6 C9 D2 E8 G7 I6 I10 J2 K1 K2 L1 L6 L7 M3 M10 N2 N9 | |
| 7EK7 | A4 B5 C1 C7 C8 D2 D6 F1 G9 I7 I9 J1 K2 L1 L6 L7 M4 M10 N2 N9 | Test P1 and P2. |
| 7FC7 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I8 J1 K3 L1 L6 L7 M3 M10 N2 N9 | Test P1 and P2. Special Leakage Test. |
| 7HG8 Triode Unit | A4 B5 C3 D6 G7 I6 I10 J6 K5 L1 L6 L7 M3 M10 N2 N9 | |
| 7HG8 Pentode Unit | A4 B5 C1 D2 E9 G8 I6 I10 J2 K6 K7 L1 L6 L8 M3 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8A8 Pentode Unit | A4 B1 B5 C7 D2 E3 G6 I6 I10 J3 K5 L1 L6 L7 M5 M10 N3 N9 | |
| 8A8 Triode Unit | A4 B5 B7 C8 D9 G1 I6 I10 J4 K5 K6 L1 L6 L7 M5 M10 N3 N9 | |
| 8B8 Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I10 J9 K3 L1 L6 L7 M3 M10 N2 N9 | |
| 8B8 Triode Unit | A4 B5 C8 D1 G9 I6 I10 J2 K5 K6 L1 M3 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8ET7 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K10 L1 L6 L9 M5 M10 N3 N9 | |
| 8ET7 Diode Unit | A4 B5 C1 F2 G3 K3 K4 L4 M5 M10 N3 N9 | Test P1 and P2. Reject if below 3. |
| 8EV7 | A4 B5 C3 C8 D2 D7 F1 G6 I7 I10 J1 K6 K7 L1 L6 L7 M5 M10 N3 N9 | Test P1 and P2. |
| 8FQ7 | Use 8CG7 data. | |
| 8GJ7 Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J6 K6 K7 L1 L6 L8 M3 M10 N2 N9 | |
| 8GJ7 Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K6 K7 L1 L6 L8 M3 M10 N2 N9 | |
| 8GX7 Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J2 K2 L1 L6 L7 M3 M10 N2 N9 | |
| 8GX7 Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K8 L1 L6 L8 M3 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8HA6 | A4 B3 B5 B9 C1 D2 E6 E8 G7 I7 I10 J1 K5 K6 L1 L6 L8 M5 M10 N3 N9 | |
| 8HG8 Triode Unit | A4 B5 C3 D6 G7 I6 I10 J6 K5 L1 L6 L7 M5 M10 N3 N9 | |
| 8HG8 Pentode Unit | A4 B5 C1 D2 E9 G8 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8JE8 Triode Unit | A4 B5 C1 D2 G3 J1 K7 K8 L1 L6 L7 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8JE8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K1 L1 L6 L7 M5 M10 N3 N9 | |
| 8JK8 Triode Unit 1 | A4 B5 B9 C8 D7 G6 I6 I110 J2 K2 L1 L6 L7 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8JK8 Triode Unit 2 | A4 B5 B9 C3 D2 G1 I6 I10 J3 K7 K8 L1 L6 L8 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8JL8 Triode Unit | A4 B5 C1 D2 G3 I8 I9 J1 K6 L1 L6 L7 M5 M10 N3 N9 | |
| 8JL8 Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J4 K6 L1 L6 L8 M5 M10 N3 N9 | |
| 8JT8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K6 K7 L1 M3 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8JT8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 L1 L6 L8 M3 M10 N2 N9 | |
| 8JV8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K10 L1 L6 L8 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8JV8 Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N3 N9 | |
| 8KA8 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J2 K1 K3 L1 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8KA8 Pentode Unit Grid 1 Test | A4 B5 B7 C3 D6 E8 G9 I6 I7 J1 K4 K5 L1 M5 M10 N3 N9 | |
| 8KA8 Pentode Unit Grid 3 Test | A4 B5 B6 C3 D7 E8 G9 I6 I7 J1 K10 L1 M5 M10 N3 N9 | Reject if below 3. |
| 8KS8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K10 L1 L6 L8 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8KS8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K10 L1 L6 L9 M5 M10 N3 N9 | |
| 8LC8 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J2 K1 K3 L1 M5 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8LC8 Pentode Unit Grid 1 Test | A4 B3 B5 C7 D6 E8 G9 I6 I7 J1 K4 K5 L1 M5 M10 N3 N9 | |
| 8LC8 Pentode Unit Grid 3 Test | A4 B5 B6 C7 D3 E8 G9 I6 I7 J1 K10 L1 M5 M10 N3 N9 | Reject if below 3. |
| 8LE8 | A4 B5 C2 C3 C7 D9 E8 F1 G6 I6 I10 J5 K6 L1 L6 L7 M3 M10 N2 N9 | Test P1 and P2. |
| 8LT8 Pentode Unit | A4 B5 B6 C1 D9 E2 G3 I7 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 8LT8 Diode Unit | A4 B5 C7 F6 G8 I6 I10 K3 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 9A8 Pentode Unit | A4 B1 B5 C7 D2 E3 G6 I6 I10 J3 K5 L1 L6 L7 M4 M10 N3 N9 | |
| 9A8 Triode Unit | A4 B5 B7 C8 D9 G1 I6 I10 J4 K5 K6 L1 L6 L7 M4 M10 N3 N9 | |
| 9AB4 | A4 B2 B3 C7 D6 G1 J1 K6 L1 L6 L7 M5 M10 N4 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 9CG8 Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I7 I8 J1 K6 L1 L6 L7 M5 M10 N4 N9 | |
| 9CG8 Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K3 L1 L6 L7 M5 M10 N4 N9 | |
| 9EA8 Triode Unit | A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M5 M10 N4 N9 | |
| 9EA8 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N4 N9 | |
| 9GB8 Triode Unit | A4 B5 B9 C3 D2 G1 I6 I10 J6 K6 K8 L1 L6 L7 M5 M10 N4 N9 | |
| 9GB8 Tetrode Unit | A4 B5 C9 D8 E7 G6 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N4 N9 | |
| 9GV8 Triode Unit | A4 B5 C3 C8 D2 G1 I6 I10 J2 K4 K5 L1 L6 L7 M5 M10 N5 N9 | |
| 9GV8 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J9 K1 K3 L1 L6 L7 M5 M10 N5 N9 | |
| 9KC6 | A4 B5 C1 C6 D2 E9 G7 I7 I10 J1 K6 L1 L6 L8 M4 M10 N3 N9 | |
| 9KZ8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J2 K4 L1 L6 L7 M5 M10 N4 N9 | |
| 9KZ8 Triode Unit | A4 B3 B5 C8 D9 G1 I6 I10 J2 K3 L1 L6 L7 M5 M10 N4 N9 | |
| 10CW5 | A4 B5 C3 D2 E9 G7 I6 I10 J9 K6 L1 L6 L8 M4 M10 N5 N9 | |
| 10DX8 Triode Unit | A4 B5 B7 C3 D1 G2 I6 I10 J2 K8 L1 L6 L7 M4 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10DX8 Pentode Unit | A4 B5 C7 D8 E9 G6 I6 I10 J3 K2 L1 L6 L7 M4 M10 N5 N9 | |
| 10EM7 Triode Unit 1 | A7 B8 C6 D4 G5 I6 I10 J2 K6 K7 L1 M5 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10EM7 Triode Unit 2 | A7 B8 C3 D1 G2 I6 I10 J10 K4 L1 L6 L7 M5 M10 N5 N9 | |
| 10EW7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M4 M10 N5 N9 | |
| 10EW7 Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K3 L1 L6 L7 M4 M10 N5 N9 | |
| 10FR7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K6 K7 L1 M4 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10FR7 Triode Unit 2 | A4 B5 C9 D2 D3 G1 I6 I10 J10 K4 L1 L6 L7 M4 M10 N5 N9 | |
| 10GK6 | A4 B3 B5 B9 C1 D2 E8 G7 I6 I10 J5 K6 K7 L1 L6 L8 M3 M10 N4 N9 | |
| 10GN8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K3 L1 M4 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10GN8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K7 L1 L6 L8 M4 M10 N5 N9 | |
| 10HA6 | A4 B3 B5 B9 C1 D2 E6 E8 G7 I7 I10 J1 K5 K6 L1 L6 L8 M3 M10 N4 N9 | |
| 10HF8 Triode Unit | A4 B5 C1 D2 G3 I6 I10 J2 K7 K8 L1 L6 L7 M4 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10HF8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K7 L1 L6 L8 M4 M10 N5 N9 | |
| 10JA8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J3 K7 L1 L6 L7 M3 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10JA8 Tetrode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J2 K5 L1 L6 L8 M3 M10 N4 N9 | |
| 10JT8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K6 K7 L1 M3 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 10JT8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 L1 L6 L8 M3 M10 N4 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 10JY8 Triode Unit | A4 B5 B6 C1 D2 G3 I7 I10 J1 K1 L1 L6 L7 M4 M10 N5 N9 | |
| 10JY8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K6 K7 L1 L6 L8 M4 M10 N5 N9 | |
| 10KR8 Triode Unit | A4 B5 B6 C1 D2 G3 I7 I10 J1 K6 K8 L1 L6 L8 M3 M10 N4 N9 | |
| 10KR8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 K5 L1 L6 L8 M3 M10 N4 N9 | |
| 10KU8 Diode Unit | A4 B5 B6 C1 F2 G3 I6 I10 K1 L4 M3 M10 N4 N9 | Test P1 and P2. Reject if below 2. |
| 10KU8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 L1 L6 L8 M3 M10 N4 N9 | |
| 10LB8 Triode Unit | A4 B5 B6 C1 D2 G3 I7 I10 J1 K7 L1 L6 L7 M3 M10 N4 N9 | |
| 10LB8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 L1 L6 L8 M3 M10 N4 N9 | |
| 10LE8 | A4 B5 C2 C3 C7 D9 E8 F1 G6 I6 I10 J5 K6 L1 L6 L7 M5 M10 N5 N9 | Test P1 and P2. |
| 10LW8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K4 L1 L6 L8 M3 M10 N4 N9 | |
| 10LW8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K7 L1 L6 L7 M3 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 11JE8 Triode Unit | A4 B5 C1 D2 G3 J1 K7 K8 L1 L6 L7 M4 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 11JE8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K1 L1 L6 L7 M4 M10 N5 N9 | |
| 11KV8 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K7 L1 L6 L7 M1 M10 N2 N9 | Depress Special Leakage/Gas Button in gas test. |
| 11KV8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K5 L1 L6 L8 M1 M10 N2 N9 | |
| 11LQ8 Triode Unit | A4 B5 B6 C1 D2 G3 I7 I10 J1 K1 L1 L6 L7 M3 M10 N4 N9 | |
| 11LQ8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K4 L1 L6 L8 M3 M10 N4 N9 | |
| 12AU8 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I9 J1 K8 L1 L6 L8 M2 M10 N3 N9 | |
| 12AU8 Triode Unit | A4 B5 C1 D2 G3 I8 I9 J1 K6 L1 L6 L7 M2 M10 N3 N9 | |
| 12BF5 | A4 B5 C3 D2 E9 G7 I6 I10 J8 K1 K3 L1 L6 L7 M2 M10 N4 N9 | |
| 12BK6 | Use 12AV6 Data. | |
| 12BR3 | A4 B5 C10 G9 K8 L4 L6 L10 M2 M10 N4 N9 | Reject if below 4. |
| 12BX6 | A4 B5 C1 C3 C6 C9 D2 E8 G7 I6 I10 J2 K2 L1 L6 L7 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 12BY3 | A4 B5 C10 G9 I6 I10 K4 L4 L6 L10 M2 M10 N4 N9 | Reject if below 4. |
| 12CD7 | A2 B7 C8 D4 E5 F6 G3 J3 K10 L1 M2 M10 N4 N9 | P1—Gm test—one eye open—one closed. P2—other eye open—second closed. P3—both eyes open. Depress Special Leakage/Gas Button in gas test. |
| 12DF5 | A4 B5 C3 C8 F1 G6 I6 I10 K8 L4 L6 L10 M2 M10 N3 N9 | Test P1 and P2. Reject if below 2. |
| 12DJ8 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I9 I10 J1 K1 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. Special Leakage Test. |
| 12DK6 | A3 B4 C2 C7 D1 E6 G5 I7 I10 J1 K7 L1 L6 L8 M2 M10 N4 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 12DM4 | A7 B8 C3 G5 I6 I10 K6 L4 L6 L10 M2 M10 N4 N9 | Reject if below 4. |
| 12DM5 | A3 B4 C1 D2 E6 G7 I6 I10 J9 K2 L1 L6 L7 M2 M10 N3 N9 | |
| 12DQ4 | Use 12AX4 Data. | |
| 12FV7 | A4 A5 B9 C3 C8 D2 D7 F1 G6 I6 I10 J4 K6 L1 L6 L8 M3 M10 N1 N9 | Test P1 and P2. |
| 12FX5 | A3 B4 C1 D2 D5 E6 G7 I7 I10 J1 K5 K7 L1 L6 L8 M2 M10 N4 N9 | |
| 12GN7 | A4 A5 B6 C1 D2 E8 G7 I7 I10 J1 K3 L1 L6 L8 M3 M10 N1 N9 | |
| 12HU8 | A4 B5 C7 D2 D6 E1 E9 F8 G3 I8 I10 J1 K5 K7 L1 L6 L7 M2 M10 N4 N9 | Test P1 and P2. |
| 12HG7 | A4 A5 B3 B6 B9 C1 D2 E8 G7 I7 I10 J1 K3 L1 L6 L8 M3 M10 N1 N9 | |
| 12JN8 Triode Unit | A4 B5 B8 C3 D1 G2 I6 I10 J2 K2 L1 L6 L7 M2 M10 N4 N9 | |
| 12JN8 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 K4 L1 L6 L7 M2 M10 N4 N9 | |
| 12KL8 Diode Unit | A4 B5 B9 C3 G8 K3 I4 M2 M10 N3 N9 | Reject if below 1.0. |
| 12KL8 Pentode Unit | A4 B1 B5 B9 C3 D2 E6 G7 I8 I10 J1 K7 L1 L6 L7 M2 M10 N3 N9 | |
| 12L8 | A6 B7 C2 D1 D3 E5 F4 G8 I6 I10 J6 K3 L1 M2 M10 N3 N9 | Test P1 and P2. |
| 13CW4 | A3 B1 B5 C2 D6 G4 I6 I8 J1 K1 K2 L1 L6 L7 M1 M10 N3 N9 | Use WG-340A Adaptor. |
| 13D1 | Use 1633 Data. | |
| 13EC7 | A4 B5 C1 C3 C6 C9 D2 E8 G7 I6 I10 J3 K6 L1 L6 L7 M2 M10 N4 N9 | |
| 13FR7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K6 K7 L1 M1 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 13FR7 Triode Unit 2 | A4 B5 C9 D2 D3 G1 I6 I10 J10 K4 L1 L6 L7 M1 M10 N3 N9 | |
| 13GB5 | A4 B5 C3 C8 D1 D2 E6 E7 G10 I6 I10 J10 K6 K7 L1 L6 L8 M2 M10 N5 N9 | |
| 13GC8 Triode Unit | A4 B5 B6 C3 D2 G1 I6 I10 J5 K6 K7 L1 L6 L7 M2 M10 N4 N9 | |
| 13GC8 Tetrode Unit | A4 B5 C7 D9 E8 G6 I6 I10 J7 K2 L1 L6 L7 M2 M10 N4 N9 | |
| 14GT8 Triode Unit | A4 B5 C7 D8 G9 J2 K9 L1 M2 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 14GT8 Diode Unit | A4 B5 C1 C3 F6 G2 K1 L3 M2 M10 N5 N9 | Test P1 and P2. Reject if below 3. |
| 14JG8 Triode Unit | A4 B5 C7 D8 G9 I6 I10 J2 K6 K8 L1 M1 M10 N4 N9 | Depress Special Leakage/Gas Button in gas test. |
| 14JG8 Diode Unit | A4 B5 C1 C3 F6 G2 I6 I10 K3 K4 L3 L6 L7 M1 M10 N4 N9 | Test P1 and P2. Reject if below 3. |
| 15EA7 Triode Unit 1 | A7 B8 C6 D4 G5 J2 K10 L1 L6 L7 M1 M10 N5 N9 | Depress Special Leakage/Gas Button in gas test. |
| 15EA7 Triode Unit 2 | A7 B8 C3 D1 G2 J8 K6 L1 L6 L7 M1 M10 N5 N9 | |
| 15EW7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M5 M9 N1 N8 | |
| 15EW7 Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K3 L1 L6 L7 M5 M9 N1 N8 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 15HA6 | A4 B3 B5 B9 C1 D2 E6 E8 G7 I7 I10 J1 K5 K6 L1 L6 L8 M4 M9 N1 N8 | |
| 15HB6 | A4 B3 B5 B9 C1 D2 E8 G7 I6 I9 J1 K3 K4 L1 L6 L8 M5 M9 N1 N8 | |
| 15LE8 | A4 B5 C2 C3 C7 D9 E8 F1 G6 I6 I10 J5 K6 L1 L6 L7 M5 M9 N1 N8 | Test P1 and P2. |
| 16AQ3 | A4 B5 C10 G3 G8 G9 K2 K3 L4 L6 L9 M4 M9 N2 N8 | Reject if below 4. |
| 16GK6 | A4 B3 B5 B9 C1 D2 E8 G7 I6 I10 J5 K6 K7 L1 L6 L8 M4 M9 N1 N8 | |
| 16GK8 Triode Unit | A4 B2 B5 C8 D1 G9 I6 I10 J5 K6 L1 L6 L7 M5 M9 N2 N8 | |
| 16GK8 Tetrode Unit | A4 B5 C2 D3 E7 G6 I6 I10 J6 K5 K7 L1 L6 L8 M5 M9 N2 N8 | |
| 17A8 Pentode Unit | A4 B1 B5 C7 D2 E3 G6 I6 I10 J3 K5 L1 L6 L7 M4 M10 N2 N8 | |
| 17A8 Triode Unit | A4 B5 B7 C8 D9 G1 I6 I10 J4 K5 K6 L1 L6 L7 M4 M10 N2 N8 | |
| 17BR3 | A4 B5 C10 G9 K8 L4 L6 L10 M3 M9 N2 N8 | Reject if below 4. |
| 17DM4 | A7 B8 C3 G5 I6 I10 K6 L4 L6 L10 M3 M9 N2 N8 | Reject if below 4. |
| 17DQ4 | Use 17AX4 Data. | |
| 17HC8 Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I10 J9 K7 L1 L6 L7 M3 M9 N2 N8 | |
| 17HC8 Triode Unit | A4 B2 B5 C8 D1 G9 I6 I10 J3 K5 K6 L1 M3 M9 N2 N8 | Reject if below 3. Depress Special Leakage/Gas Button in gas test. |
| 17JK8 Triode Unit 1 | A4 B5 B9 C8 D7 G6 I6 I10 J2 K2 L1 L6 L7 M M9 N2 N8 | Depress Special Leakage/Gas Button in gas test. |
| 17JK8 Triode Unit 2 | A4 B5 B9 C3 D2 G1 I6 I10 J3 K7 K8 L1 L6 L8 M4 M9 N2 N8 | Depress Special Leakage/Gas Button in gas test. |
| 18HB8 Triode Unit | A4 B5 B8 C2 D1 G3 J1 K6 K8 L1 L6 L7 M5 M9 N3 N8 | |
| 18HB8 Pentode Unit | A4 B5 C8 D9 E6 G7 I8 I9 J1 K4 K5 L1 L6 L7 M5 M9 N3 N8 | |
| 19BR5 | A4 B5 C2 D1 E3 E8 E9 G7 I6 I10 J2 K9 L1 M4 M9 N4 N8 | P1—Gm test—shadow minimum. P2 or P3—shadow maximum. |
| 19BX6 | A4 B5 C1 C3 C6 C9 D2 E8 G7 I6 I10 J2 K2 L1 L6 L7 M5 M9 N5 N8 | Depress Special Leakage/Gas Button in gas test. |
| 19BY7 | A4 B5 C1 C3 D2 E8 G7 I6 I7 J1 K6 L1 L6 L7 M4 M9 N3 N8 | |
| 19CS4 | A7 B8 C10 G2 G3 G5 I6 I10 K4 L4 L6 L10 M5 M9 N5 N8 | Reject if below 3. |
| 19EW7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M4 M9 N3 N8 | |
| 19EW7 Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K3 L1 L6 L7 M4 M9 N3 N8 | |
| 19FL8 Pentode Unit | A4 B5 B9 C3 D2 E1 G6 I6 I10 J4 K6 K7 L1 L6 L7 M4 M9 N3 N8 | |
| 19FL8 Diode Unit | A4 B5 C3 F7 G8 I6 I10 K2 L4 M4 M9 N3 N8 | Test P1 and P2. Reject if below 4. |
| 19GQ7 | A4 B5 C1 C7 C9 F6 G8 H2 I6 I10 K7 L3 L6 L8 M2 M9 N1 N8 | Test P1, P2 and P3. Reject if below 4. |
| 19HR6 | A3 B2 B4 C7 D1 E6 G5 I7 I10 J1 K2 K3 L1 L6 L7 M2 M9 N1 N8 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 19KG8 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K2 K3 L1 L6 L7 M4 M9 N3 N8 | |
| 19KG8 Triode Unit | A4 B5 B8 C3 D2 G1 I6 I10 J2 K2 L1 L6 L7 M4 M9 N3 N8 | |
| 19JN8 Triode Unit | A4 B5 B8 C3 D1 G2 I6 I10 J2 K2 K3 L1 L6 L7 M2 M9 N1 N8 | |
| 19JN8 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K3 L1 L6 L7 M2 M9 N1 N8 | |
| 19HR6 | A3 B2 B4 C7 D1 E6 G5 I7 I10 J1 K2 K3 L1 L6 L7 M4 M9 N3 N8 | |
| 19HS6 | A3 B2 B4 C7 D1 E6 G5 I8 I10 J1 K2 K3 L1 L6 L7 M2 M9 N1 N8 | |
| 19HV8 Triode Unit | A4 B5 C3 D1 G2 I6 I10 J2 K8 L1 M2 M9 N1 N8 | Depress Special Leakage/Gas Button in gas test. |
| 19HV8 Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I10 J2 K4 L1 L6 L7 M2 M9 N1 N8 | |
| 19U5 | A1 B6 C5 D3 E4 G2 I6 I10 J3 K10 L1 M4 M9 N3 N8 | P1—Gm test—shadow minimum. P2—shadow maximum. |
| 20EW7 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J7 K10 L1 L6 L7 M3 M9 N4 N8 | |
| 20EW7 Triode Unit 2 | A4 B5 C9 D2 G1 I6 I10 J10 K3 L1 L6 L7 M3 M9 N4 N8 | |
| 25BR3 | A4 B5 C10 G9 K8 L4 L6 L10 M5 M10 N1 N8 | Reject if below 4. |
| 25DK4 | A3 B4 C7 G5 I6 I10 K5 L4 L6 L10 M1 M9 N5 N8 | Reject if below 4. |
| 25FG6 | A2 B7 C8 D5 E4 G10 I7 I10 J10 K3 L1 L6 L7 M4 M10 N1 N8 | |
| 35FN5 | A2 B7 C3 C6 D4 D5 E1 E8 G10 I7 I10 J1 K5 K7 L1 L6 L8 M5 M8 N1 N7 | |
| 26AQ8 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N8 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 26BK6 Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M3 M10 N1 N8 | Test P1 and P2. Reject if below 4. |
| 26BK6 Triode Unit | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M3 M10 N1 N8 | Depress Special Leakage/Gas Button in gas test. |
| 28AK8 Triode Unit | A4 B5 C7 D8 G9 J2 K7 K8 L1 M3 M10 N2 N8 | Depress Special Leakage/Gas Button in gas test. |
| 28AK8 Diode Unit 1 | A4 B5 C3 C7 G6 I6 I10 K8 L3 M3 M10 N2 N8 | Test P1 only. Reject if below 1. |
| 28AK8 Diode Unit 2 | A4 B5 C3 C7 F2 H1 I6 I10 K7 L3 L6 L8 M3 M10 N2 N8 | Test P2 and P3 only. Reject if below 3. |
| 28HA6 | A4 B3 B5 B9 C1 D2 E6 E8 G7 I7 I10 J1 K5 K6 L1 L6 L8 M2 M10 N1 N8 | |
| 30AE3 | A4 B5 C10 G3 G8 G9 K2 K3 L4 L6 L9 M5 M10 N5 N8 | Reject if below 4. |
| 30C1 | Use 9A8 Data. | |
| 30CW5 | A4 B5 C3 D2 E9 G7 I6 I10 J9 K6 L1 L6 L8 M5 M10 N5 N8 | |
| 30P5 | Use 7ED7 Data. | |
| 34R3 | A4 B5 C10 G2 G9 I6 I10 K6 L4 L6 L10 M1 M10 N4 N8 | Reject if below 4. |
| 35HB8 Triode Unit | A4 B5 B8 C2 D1 G3 J1 K6 K8 L1 L6 L7 M5 M8 N1 N7 | |
| 35HB8 Pentode Unit | A4 B5 C8 D9 E6 G7 I8 I9 J1 K4 K5 L1 L6 L7 M5 M8 N1 N7 | |
| 36 | A1 B5 C4 D10 E3 G2 I6 I10 J6 K8 K9 K10 L1 M5 M10 N2 N9 | Use WG-337A-5 Adaptor. |
| 37 | A1 B5 C4 D3 G2 I6 I10 J8 K7 K8 L1 M5 M10 N2 N9 | Use WG-337A-5 Adaptor. |
| 38 | A1 B5 C4 D10 E3 G2 I6 I10 J10 K8 K9 L1 M5 M10 N2 N9 | Use WG-337A-5 Adaptor. |
| 40FR5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K8 L1 L6 L8 M5 M8 N5 N7 | |
| 50E5 | A2 B7 C8 D5 E4 G10 I6 I10 J10 K7 L1 L6 L7 M5 M7 N5 N6 | |
| 50FA5 | A3 B4 C1 D2 D5 E6 G7 I6 I10 J9 K4 L1 L6 L7 M5 M7 N5 N6 | |
| 50FK5 | A3 B4 C1 D2 D5 E6 G7 I7 I10 J1 K6 K7 L1 L6 L8 M5 M7 N5 N6 | |
| 50HC6 | A3 B4 C1 D2 E5 G7 I7 I10 J1 K6 L1 L6 L8 M5 M7 N5 N6 | |
| 50HK6 | A3 B4 C1 D2 E5 G7 I6 I10 J9 K1 L1 L6 L7 M5 M7 N5 N6 | |
| 50HN5 | A4 B5 C3 D1 D2 E9 G7 I7 I10 J1 K8 L1 L6 L9 M5 M7 N5 N6 | |
| 50JY6 | A2 B3 B7 C8 D5 E4 G10 I6 I10 J9 K2 L1 L6 L8 M5 M7 N5 N6 | |
| 55 Triode Unit | A1 B6 C5 D10 G2 I6 I10 J9 K7 K9 L1 M4 M6 N2 N6 | Use WG-337A-6 Adaptor. |
| 55 Diode Unit | A1 B6 C5 F3 G4 K1 L4 M4 M6 N2 N6 | Use WG-337A-6 Adaptor. Test P1 and P2. Reject if below 3. |
| 57 | A1 B6 C4 C5 D10 E3 G2 I6 I10 J6 K8 L1 M4 M6 N2 N6 | Use WG-337A-6 Adaptor. |
| 59 | A1 B7 C5 C6 D4 E3 G2 I6 I10 J9 K4 L1 M4 M6 N2 N6 | Use WG-337A-7 Adaptor. |
| 60FX5 | A3 B4 C1 D2 D5 E6 G7 I7 I10 J1 K6 L1 L6 L8 M5 M9 N5 N7 | |
| 63T1 | Use 6AB8 Data. | |
| 77 | A1 B4 B6 C5 D10 E3 G2 I6 I10 J6 K6 K9 L1 M5 M10 N2 N9 | Use WG-337A-6 Adaptor. |
| 79 | A1 B6 C4 D3 D10 F2 G5 I6 I10 J1 K6 K7 L1 M5 M10 N2 N9 | Test P1 and P2. Use WG-337A-6 Adaptor. |
| 81 | A1 B4 G2 K2 L5 L6 L9 M3 M10 N2 N9 | Use WG-337A-5 Adaptor. Reject if below 3. |
| 89 | A1 B6 C4 C5 D10 E3 G2 I6 I10 J8 K4 K5 L1 M5 M10 N2 N9 | Use WG-337A-6 Adaptor. |
| 90C1 | A8 G1 G5 K5 L1 L6 L8 M5 M10 N5 N8 | Use WG-324A Adaptor. |
| 150B2 | Use OA2 Data. | |
| 350B | A2 B7 C8 D5 E4 G3 I6 I10 J8 K3 K4 L1 L6 L7 M3 M10 N1 N9 | |
| 407A | A1 A9 B5 C2 C8 D3 D7 F4 G6 I6 I7 J1 K6 L1 L6 L7 M5 M9 N5 N8 | Test P1 and P2. |
| 512AX | A5 B3 D4 G1 G2 J1 K10 L4 M5 M6 N4 N6 | Use WG-338A Adaptor. Start red dot end at Pin 1. Calibrate WT-110A to 6. Reject if below 2. Depress Special Leakage/Gas Button in gas test. |
| 1619 | A2 B7 D5 E4 G3 J1 K6 K7 L1 L6 L8 M4 M6 N2 N6 | |
| 1625 | A1 B7 C6 D4 E3 G10 I6 I10 J9 K6 L1 L6 L7 M2 M10 N4 N9 | Use WG-337A-7 Adaptor. |
| 1626 | A2 B7 C8 D5 G3 I6 I10 J9 K5 L1 M2 M10 N3 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 5636 | A3 B6 C2 C4 C8 D1 E7 G5 I8 I9 J1 K7 K8 L1 L6 L7 M5 M10 N2 N9 | Use WG-339A Adaptor. |
| 5755 | A4 B5 C2 C7 D3 D6 F1 G8 J1 K9 K10 L1 M2 M10 N3 N9 | Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 5840 | A3 B6 C2 C4 C8 D1 E7 G5 I8 I9 J1 K6 L1 L6 L7 M5 M10 N2 N9 | Use WG-339A Adaptor. |
| 6029 | A2 B4 D3 G1 J7 K6 L1 L6 L7 M2 M6 N1 N6 | Use WG-338A Adaptor. Red dot at Pin 1. |
| 6042 | Use 1633 Card. | |
| 6073 | Use OA2 Card. | |
| 6074 | Use OB2 Card. | |
| 6082 | A7 B8 C3 C6 D1 D4 F2 G5 J1 K1 L5 L6 L9 M1 M9 N5 N8 | Test P1 and P2. |
| 6085 | A4 B5 B9 C3 C8 D2 D7 F6 G1 I6 I10 J5 K9 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6111 | A3 B6 C4 C5 D2 D7 F1 G8 J1 K6 L1 L6 L7 M5 M10 N2 N9 | Use WG-339A Adaptor. Test P1 and P2. |
| 6112 | A3 B6 C4 C5 D2 D7 F1 G8 J1 K2 L1 M5 M10 N2 N9 | Use WG-339A Adaptor. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6137 | Use 6SK7 Card. | |
| 6203 | A4 B5 C7 F1 G9 I6 I10 K4 L4 L6 L9 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6216 | A4 B5 C3 C8 D2 E7 G1 G6 I6 I10 J6 K5 K6 L1 L6 L8 M3 M10 N1 N9 | |
| 6354 | Use OA2 Card. | |
| 6485 | Use 6AH6 Data. | |
| 6582 | Use 6AK5 Data. | |
| 6626 | Use OA2 Card. | |
| 6627 | Use OB2 Card. | |
| 6688 | Use E180F Card. | |
| 6853 | Use 5Y3 Data. | |
| 6900 | Use 5687 Card. | |
| 7036 | Use 6BY6 Card. | |
| 7044 | A4 B5 C3 C6 D2 D7 F1 G9 I6 I10 J4 K6 K7 L1 L6 L8 M2 M10 N4 N9 | Test P1 and P2. |
| 7054 | A4 B5 C1 C3 C9 D2 E8 G7 I7 I9 J1 K6 L1 L6 L8 M2 M10 N4 N9 | |
| 7055 | A3 B4 C1 C5 C6 F2 G7 I6 I10 K7 L3 L6 L8 M1 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| 7056 | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K9 L1 L6 L8 M1 M10 N3 N9 | |
| 7057 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I7 I8 J1 K4 L1 L6 L7 M1 M10 N3 N9 | Test P1 and P2. Use Special Leakage Test. |
| 7058 | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J2 K8 L1 M1 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. Test P1 and P2. |
| 7059 Pentode Unit | A4 B5 C7 D2 E3 G6 I7 I10 J1 K6 L1 L6 L7 M1 M10 N3 N9 | |
| 7059 Triode Unit | A4 B5 C8 D9 G1 I7 I10 J1 K3 L1 L6 L7 M1 M10 N3 N9 | |
| 7061 | A4 B5 C7 D3 D6 E1 E8 G9 I6 I10 J7 K6 K8 L1 L6 L7 M2 M10 N4 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 7105 | A7 B8 C3 C6 D1 D4 F2 G5 J1 K1 L5 L6 L9 M2 M10 N4 N9 | Test P1 and P2. |
| 7119 | A4 A5 B8 C3 C6 D2 D7 F9 G1 I6 I10 J4 K5 L1 L6 L8 M5 M10 N2 N9 | Test P1 and P2. |
| 7167 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K1 L1 L6 L7 M1 M10 N3 N9 | |
| 7247 Triode Unit 1 | A4 B5 C8 D7 G6 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 7247 Triode Unit 2 | A4 B5 C3 D2 G1 I6 I10 J5 K4 L1 M2 M10 N3 N9 | |
| 7258 Pentode Unit | A4 B5 C9 D8 E7 G6 I6 I7 J1 K4 L1 L6 L7 M2 M10 N4 N9 | |
| 7258 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J6 K3 L1 M2 M10 N4 N9 | |
| 7355 | A2 B7 C5 D6 E8 G3 I6 I10 J8 K3 K4 L1 L6 L7 M3 M10 N1 N9 | |
| 7360 | A4 B5 C1 C8 C9 D3 E2 F6 G7 I7 I9 J1 K10 L1 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. Balance between P1 and P2 must be good. |
| 7370 | A4 A5 B8 C3 C6 D2 D7 F1 G9 I6 I10 J4 K6 L1 L6 L8 M3 M9 N4 N8 | Test P1 and P2. |
| 7382 | A3 B4 C2 D1 G7 I6 I10 J2 K8 L1 M2 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 7408 | Use 6V6 Card. | |
| 7489 | Use 12AU7 Card. | |
| 7492 | Use 12AT7 Card. | |
| 7494 | Use 12AX7 Card. | |
| 7496 | Use 6BA6 Card. | |
| 7551 | A4 B5 B7 C1 D2 E3 G6 I6 I10 J7 K5 L1 L6 L7 M2 M10 N4 N9 | |
| 7558 | A4 B5 B7 C1 D2 E3 G6 I6 I10 J7 K5 L1 L6 L7 M3 M10 N1 N9 | |
| 7581 | A2 B7 C8 D5 E4 G3 I6 I10 J7 K5 K7 L1 L6 L7 M3 M10 N1 N9 | |
| 7587 | A1 A3 B5 C2 D6 E4 G10 I6 I8 J1 K4 K5 L1 L6 L7 M5 M10 N2 N9 | Use Nuvistor Adaptor WG-340A. |
| 7591 | A2 B7 C5 D6 E4 E8 G3 I6 I10 J5 K2 L1 L6 L7 M3 M10 N1 N9 | |
| 7631 | Use 6AL5 Card. | |
| 7687 | Use 7199 Card. | |
| 7701 | A4 B5 C1 C3 C8 D2 E7 E9 G6 I7 I9 J1 KI K2 L1 M1 M10 N3 N9 | |
| 7716 Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K3 L1 M1 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 7716 Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K1 L1 L6 L7 M1 M10 N3 N9 | |
| 7721 | A4 B5 B8 C1 C3 D2 E9 G7 I7 I10 J1 K3 L1 L6 L8 M5 M10 N2 N9 | |
| 7737 | A4 B5 C1 C3 C8 D2 E9 G7 I7 I10 J1 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 7751 | A2 B7 C8 D5 E4 G3 I6 I10 J10 K7 L1 L6 L8 M3 M10 N1 N9 | |
| 7788 | A4 B5 C1 C3 C8 D2 E6 E9 G7 I7 I10 J1 K1 K2 L1 L6 L8 M5 M10 N2 N9 | |
| 7861 | A1 B5 B9 C2 C8 D3 D7 F4 G6 J1 K5 K6 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 7898 | A4 B5 C3 C8 D2 D7 F1 G6 J1 K6 L1 L6 L7 M2 M10 N4 N9 | Test P1 and P2. |
| 7905 | A9 B1 B7 D2 E3 E8 G6 J6 K5 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 8032 | Use 6883 Data. | |
| 8056 | A1 A3 B5 C2 D6 G4 I6 I9 J1 K4 L2 L6 L7 M5 M10 N2 N9 | Use WG-340A Adaptor |
| 8058 | A3 B5 C2 C4 C6 D1 G10 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Use Nuvistor Adaptor WG-340A. |
| 8084 | A3 B4 C2 C7 D1 E6 G5 I6 I10 J4 K2 L1 L6 L7 M1 M10 N3 N9 | Depress Special Leakage/Gas Button in gas test. |
| 8102 Triode Unit | A4 B5 C7 C8 D9 G1 I6 I10 J2 K2 L1 L6 L7 M2 M10 N5 N9 | |
| 8102 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K2 L1 L6 L7 M2 M10 N5 N9 | |
| 8106 | A4 B5 C2 C6 C9 D7 E3 E8 G1 I6 I10 J5 K1 K3 L1 L6 L7 M1 M10 N3 N9 | |
| 8236 | Use 6DQ5 Data. | |
| 8327 | Use 6BQ5 Data. | |
| 8417 | A2 B7 C8 D5 E4 G3 I6 I10 J7 K5 L1 L6 L8 M4 M10 N2 N9 | |
| 8425 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K5 L1 L6 L7 M5 M10 N2 N9 | |
| 8426 | A3 B4 C2 C7 D1 E6 G5 I7 I9 J1 K5 L1 L6 L7 M2 M10 N3 N9 | |
| 8431 | A4 B5 B9 C3 C8 D2 D7 F1 G6 I9 I10 J1 K1 L1 L6 L7 M2 M10 N3 N9 | Test P1 and P2. |
| 8445 Triode Unit | A4 B5 C8 D9 G1 I6 I9 J1 K1 L1 L6 L7 M4 M10 N2 N9 | |
| 8445 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K3 L1 L6 L7 M4 M10 N2 N9 | |
| 8446 Triode Unit | A4 B5 C3 D1 G2 I7 I9 J1 K1 L1 L6 L7 M4 M10 N2 N9 | |
| 8446 Pentode Unit | A4 B5 C8 D9 E7 G6 I7 I10 J1 K3 L1 L6 L7 M4 M10 N2 N9 | |
| 8447 | Use 12BR7 Data. | |
| 8448 | Use 12BY7 Data. | |
| 8532 | Use 6J4 Data. | |
| 8552 | Use 6883 Data. | |
| 9006 | A3 B4 C2 C7 G1 G5 K7 K8 L3 M5 M10 N2 N9 | Reject if below 3. |

## 7-PIN NUVISTOR ADAPTOR

A 7-pin Nuvistor adaptor can be constructed using a 7-pin Nuvistor socket and a standard 8-pin octal base. Connect the pins of the Nuvistor socket to the octal base as indicated below:

| 7-Pin Nuvistor Socket (Pin Number) | CONNECT TO | Octal Base (Pin Number) |
|---|---|---|
| 1 | | 1 |
| 2 | | 3 |
| 4 | | 7 |
| 6 | | 5 |
| 7 | | 6 |
| 10 | | 4 |
| 12 | | 2 |
| metal case | | 8 |

Insert the adaptor into the octal socket of the WT-110A, and insert the Nuvistor into the adaptor. Card punch data for the 7-pin Nuvistor tubes is included in the basic tube list in this Supplement.

## CARD-PUNCH AND INTERCHANGEABILITY DATA FOR FOREIGN TUBE TYPES

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| A2521 | Use 6CR4 Card. | |
| B719 | Use 6AQ8 Card. | |
| CK573AX | A2 B4 C3 G1 J9 K6 K7 L1 M2 M6 N1 N6 | Red mark at Pin 1 end. |
| D2M9 | Use 6AL5 Card. | |
| D3a | Use 7721 Card. | |
| DC90 | Use 6C4 Card. | |
| DL193 | Use 3V4 Card. | |
| DY86 | Use 1S2 Card. | |
| E182CC | Use 5687 Card. | |
| E235L | Use 7751 Card. | |
| E80CC | Use 6085 Data. | |
| EBF35 Pentode Unit | A1 B8 C2 C5 C6 C7 D10 E4 G3 I6 I10 J4 K5 L1 M5 M10 N2 N9 | |
| EBF35 Diode Unit | A1 B8 C2 C7 F5 G6 K7 K8 L3 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| EC83 | Use 6CM Card. | |
| EC88 | Use 6DL4 Data. | |
| ECC230 | Use 6AS7 Card. | |
| ECC40 | A1 B8 C4 C7 D3 D6 F2 G5 I6 I10 J4 K2 K3 L1 M5 M10 N2 N9 | Test P1 and P2. Use Special Adaptor. |
| ECF80 | Use 6BL8 Card. | |
| ECF86 | Use 6HG8 Cards. | |
| ECL84 | Use 6DX8 Card. | |
| ECL86 | Use 6GW8 Card. | |
| EF42 | A1 B3 B4 B8 C7 D6 E5 G2 J2 K2 K3 L1 M5 M10 N2 N9 | Use Special Adaptor. Depress Special Leakage/Gas Button in gas test. |
| EF37A | A2 B5 B7 C8 D10 E4 G3 I6 I10 J4 K4 K5 L1 M5 M10 N2 N9 | |
| EF97 | Use 6ES6 Card. | |
| EF98 | Use 6ET6 Card. | |
| EF183 | Use 6EH7 Card. | |
| EF184 | Use 6EJ7 Card. | |
| EF861 | Use E18OF Card. | |
| EF905 | Use 6AK5 Card. | |
| EH90 | Use 6CS6 Card. | |
| EL41 | A1 B8 C3 C7 D6 E5 G2 I6 I10 J5 K1 K4 L1 L6 L7 M5 M10 N2 N9 | Use Special Adaptor. |
| EL83 | Use 6CK6 Card. | |
| EL84 | Use 6BQ5 Card. | |
| EL500 | Use 6CB5 Card. | |
| EL803 | Use 6CK6 Card. | |
| ELL80 | Use 6HU8 Data. | |
| EM80 | Use 6BR5 Card. | |
| EM81 | Use 6DA5 Card. | |
| EM87 | Use 6HU6 Data. | |
| EQ80 | Use 6BE7 Card. | |
| EY82 | A4 B5 C3 G9 K6 K8 L4 L6 L10 M5 M10 N2 N9 | Reject if below 3. |
| EY83 | Use 6S2 Card. | |
| EY87 | Use 6S2 Card. | |
| EY88 | Use 6AL3 Card. | |
| HD51 | Use OA2 Card. | |
| HD52 | Use OB2 Card. | |
| HM34 | Use 12CD7 Card. | |
| LN152 | Use 6AB8 Card. | |
| LM152 | Use 6AB8 Card. | |
| LZ319 | Use 9A8 Card. | |
| N153 | Use 15A6 Card. | |
| N154 | Use 16A5 Card. | |
| N329 | Use 16A5 Card. | |
| N709 | Use 6BQ5 Card. | |
| PC86 | Use 4CM4 Card. | |
| PCC89 | Use 7FC7 Card. | |
| PCF80 | Use 9A8 Card. | |
| PCF86 | Use 7HG8 Cards. | |
| PLL80 | Use 12HU8 Data. | |
| PM04 | Use 6BA6 Card. | |
| PM05 | Use 6AK5 Card. | |
| PY83 | Use 17Z3 Card. | |
| PY86 | Use 1S2 Card. | |
| QS150/40 | Use OD3 Card. | |
| QS1207 | Use OA2 Card. | |
| QS1208 | Use OB2 Card. | |
| QV03-12 | Use 5763 Card. | |
| R12A | Use 6X2 Card. | |
| SP6 | Use 6AM6 Card. | |
| SU61 | Use 6X2 Card. | |
| T2M05 | Use 6J6 Card. | |
| U43 | Use 6X2 Card. | |
| U78 | Use 6X4 Card. | |
| U152 | Use 19X3 Card. | |
| U153 | Use 17Z3 Card. | |
| U154 | Use 19Y3 Card. | |
| U709 | Use 6CA4 Card. | |
| UAA91 | Use 12AL5 Card. | |
| UABC80 | Use 28AK8 Card. | |
| UB91 | Use 12AL5 Card. | |
| UBC41 | Use 14L7 Card. | |
| UBC81 Triode Unit | A4 B5 C3 D2 G1 I6 I10 J2 K6 K7 L1 M2 M10 N5 N9 | Depress Special Leakage/Gas Button for gas test. |
| UBC81 Diode Unit | A4 B5 C3 F8 G6 K3 L4 M2 M10 N5 N9 | Test P1 and P2. Reject if below 3. |
| UBF89 | Use 19FL8 Card. | |
| UC92 | Use 9AB4 Card. | |
| UCC85 | Use 26AQ8 Card. | |
| UCH81 | Use 19AJ8 Card. | |
| UCL80 Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K5 L1 L6 L7 M4 M10 N2 N8 | |
| UCL80 Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M4 M10 N2 N8 | |
| UF40 | A1 B8 C4 C7 D5 E6 G2 J4 K7 K8 L1 M2 M10 N4 N9 | Use Special Adaptor. |
| UF80 | Use 19BX6 Card. | |
| UF85 | Use 19BY7 Card. | |
| UM35 | Use 19U5 Card. | |
| UM80 | Use 19BR5 Card. | |
| UU12 | Use 6CA4 Card. | |
| V2M70 | Use 6X4 Card. | |
| V884 | Use 6CQ6 Card. | |
| W77 | Use 6CQ6 Card. | |
| W719 | Use 6BY7 Card. | |
| WD709 | Use 6N8 Card. | |
| X17 | Use 1R5 Card. | |
| X719 | Use 6AJ8 Card. | |
| Z77 | Use 6AM6 Card. | |
| Z152 | Use 6BX6 Card. | |
| ZD152 | Use 6N8 Card. | |
| 4R-HH8 | Use 4KN8 Data. | |
| 6R-HH8 | Use 6KN8 Data. | |

# Testing Novar (large 9-pin) Tubes, 10-Pin Tubes, and 12-Pin Integral All-Glass Base (Compactron) Tubes with the RCA WT-110A

The WT-110A *Automatic* Electron Tube Tester can be used to test the new Novar, 10-pin, and 12-pin integral-base tube-types. To test these tubes, a special adaptor must be constructed which contains the tube sockets and necessary switching arrangement. This adaptor is connected directly to the WT-110A through the 9-pin socket and top-cap socket of the tester.

If desired, the adaptor can be constructed with only one or two of the three types of tube sockets. Follow the same wiring arrangement shown in the schematic for the connection of the individual sockets to the tester. The switch shown in the schematic is necessary only if the 12-pin integral-base socket is used.

## MATERIAL REQUIRED

| Quantity | Description |
|---|---|
| 1 | Novar (large 9-pin) socket, Cinch #149-19-10-038 or equivalent. |
| 1 | 10-pin socket, Sylvania #7460-0035, Methode SG-640-10, or equivalent. |
| 1 | 12-pin socket, Cinch #149-10-30-025 or equivalent. |
| 1 | 9-pin plug, Vector P9D, or equivalent. |
| 1 | 3" x 4" x 5" metal box, Premier AMC-1005, or equivalent. |
| 1 | 8-pole, 5-position, non-shorting switch, Centralab PA-1027, or equivalent. |
| 31 | Ferrite Sleeves, RCA Replacement Parts Stock #209846. (Order from any RCA Electronic Instrument Distributor.) |
| 4 | #4-40 x ¼" machine screws. |
| 4 | #4-40 nuts. |
| 2 | #2-56 x ¼" machine screws. |
| 2 | #2-56 nuts. |
| 2 ft. | 10-wire conductor cable, #22, solid. |
| 6 ft. | Insulated hookup wire, #22, solid. |
| 1 | Rubber insulating grommet, ¼" I.D. |
| 1 | Top-cap from discarded vacuum tube. |

## CONSTRUCTION

Refer to the parts layout shown in the photograph, Figure 1, and the wiring as shown in the schematic diagram, Figure 2.

It is important that the ferrite sleeves be placed over the ends of all wires that connect to the socket pins, as shown in the schematic diagram. Insulation must be removed from the ends of the wires so that the ferrite sleeves can be slipped over the bare wire close to the socket connection.

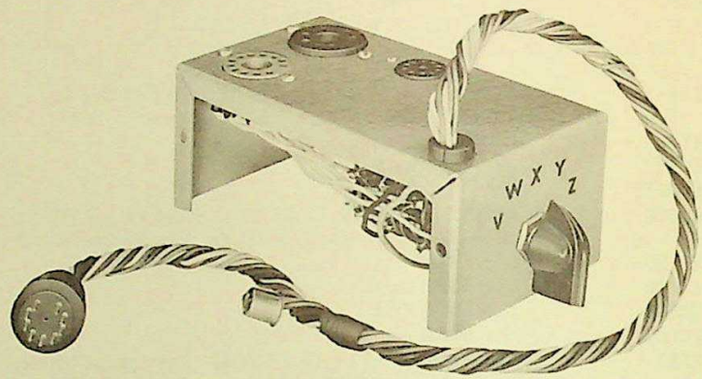



**Figure 1**

*Note:* The wires must be positioned so that contact is not made between adjacent sleeves. If these sleeves should touch each other, errors in measurement may occur.

### Wiring Procedure:

*Note:* Use only rosin-core solder in the construction of this adaptor.

Connect the wires of the 10-wire cable from the top cap and pins 2 through 8 of the 9-pin plug to the switch lugs as indicated in the schematic, Figure 2. Use hookup wire between these connections and the pins of the 10-pin socket, then to the corresponding pins of the Novar socket. Be sure to install the ferrite sleeves on all connections to the tube sockets.

Connect the wires from pins 1 and 9 of the 9-pin plug to pins 1 and 12 respectively of the 12-pin socket. Connect hookup wire between these two pins and pins 1 and 9 of the Novar and 10-pin sockets as shown in Figure 2. (Use ferrite sleeves on all of these wires.)

Wire the switch and 12-pin socket as shown in the schematic diagram, again placing a ferrite sleeve on each wire at the connection to the socket.

## Continuity Check:

When the adaptor is completed, the switching circuit can be checked by connecting an ohmmeter between the pins of the 9-pin plug and the pins of the 12-pin socket. The following table shows the 9-pin plug and the 12-pin socket connections which should indicate continuity on each of the five switch positions. Continuity between pins not listed in the table indicates an error in wiring.

| 9-Pin Plug | Switch Position | | | | |
|---|---|---|---|---|---|
| Pin # | V | W | X | Y | Z |
| 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 3 | 4 |
| 3 | 3 | 3 | 3 | 4 | 5 |
| 4 | 4 | 4 | 4 | 5 | 6 |
| 5 | 5 | 5 | 5 | 6 | 7 |
| 6 | 6 | 6 | 8 | 7 | 8 |
| 7 | 7 | 7 | 9 | 8 | 9 |
| 8 | 8 | 8 | 10 | 9 | 10 |
| 9 | 12 | 12 | 12 | 12 | 12 |
| Top Cap | 11 | 9 | 11 | 10 | 11 |

## OPERATION

To use the adaptor, insert the 9-pin plug into the 9-pin socket of the WT-110A, and connect the top cap to the top-cap socket of the tester.

**Before inserting any tube into the 12-pin socket, the switch on the adaptor must be in the position indicated in the testing data (V, W, X, Y, or Z). Failure to place the switch in the proper position may burn out the tube or damage the tester.**

*CAUTION: Do not pull the Power Lever of the tester forward to the "Power On" position until the adaptor has been completely connected.*

When testing Novar (large 9-pin) tubes or 10-pin tubes, no switching of the adaptor is necessary because the switch does not affect the circuit connected to these tube sockets.

When the adaptor is connected to the WT-110A as described above, the tube to be tested is inserted in the appropriate socket of the adaptor, and the same testing procedure is used as with conventional tube-types.

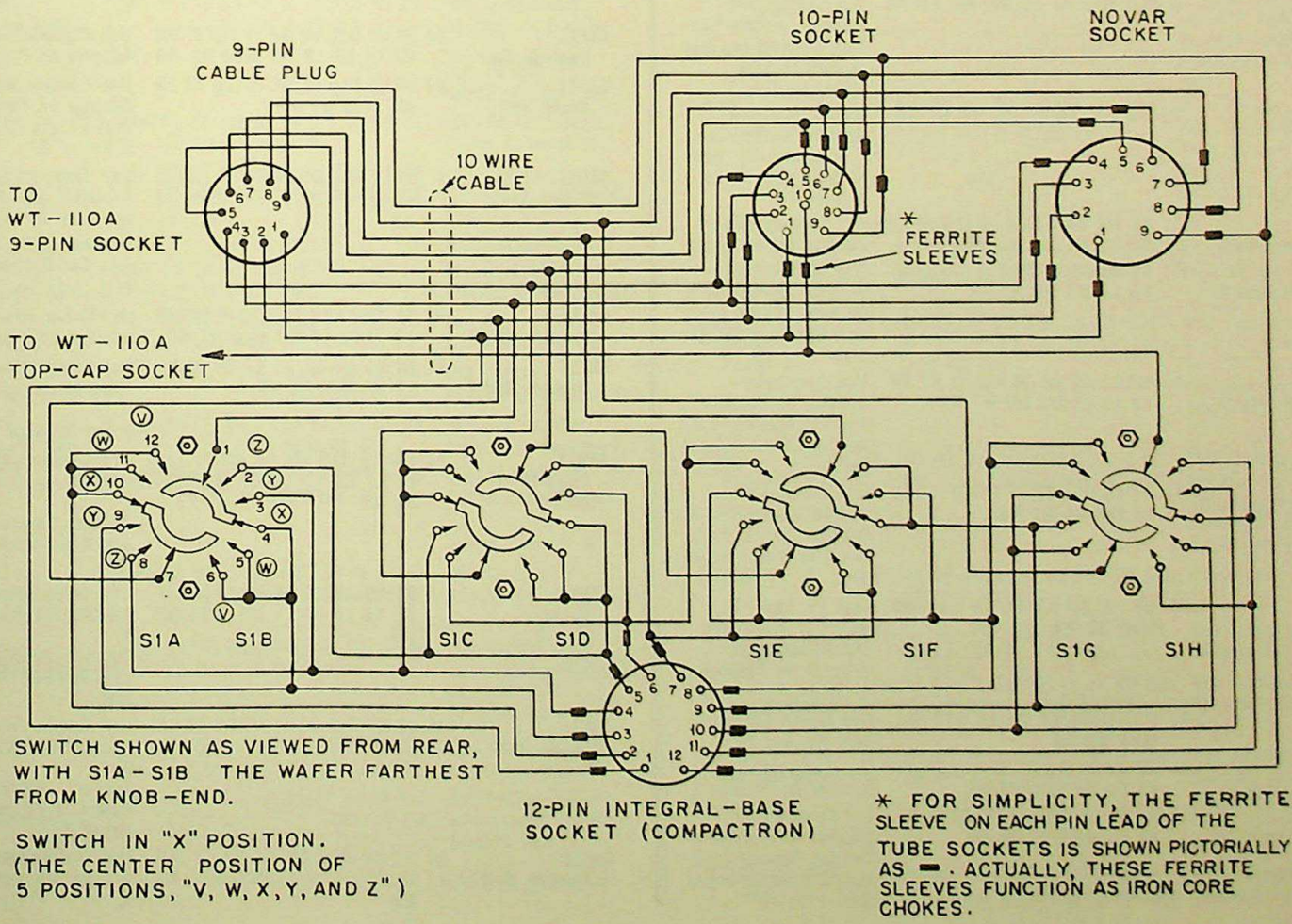

10-PIN SOCKET
NOVAR SOCKET
9-PIN CABLE PLUG
10 WIRE CABLE
TO WT-110A 9-PIN SOCKET
TO WT-110A TOP-CAP SOCKET
* FERRITE SLEEVES
S1A
S1B
S1C
S1D
S1E
S1F
S1G
S1H
SWITCH SHOWN AS VIEWED FROM REAR, WITH S1A-S1B THE WAFER FARTHEST FROM KNOB-END.
SWITCH IN "X" POSITION. (THE CENTER POSITION OF 5 POSITIONS, "V, W, X, Y, AND Z")
12-PIN INTEGRAL-BASE SOCKET (COMPACTRON)
* FOR SIMPLICITY, THE FERRITE SLEEVE ON EACH PIN LEAD OF THE TUBE SOCKETS IS SHOWN PICTORIALLY AS ▬. ACTUALLY, THESE FERRITE SLEEVES FUNCTION AS IRON CORE CHOKES.

**Figure 2**

## TESTING INFORMATION FOR
## 9-PIN NOVAR, 10-PIN, AND 12-PIN TUBE-TYPES
### (Using Adaptor Described on Pages 8 and 9)

| | | |
|---|---|---|
| **1AD2** | A1 B9 G10 K9 L5 M2 M6 N1 N6 | Use Compactron Adaptor on any position. Connect cap lead of tester to tube cap rather than to Adaptor. Reject if below 1.0. |
| **1AJ2** | A1 B9 G10 K7 K9 L5 M2 M6 N1 N6 | Use Compactron Adaptor on Position Y. Connect cap lead of tester to tube cap rather than to Adaptor. Reject if below 3. |
| **2AH2** | A9 B1 G10 K5 K6 L5 M3 M6 N2 N6 | Use Compactron Adaptor on Position X. Connect cap lead of tester to tube cap rather than to Adaptor. Reject if below 3. |
| **2AS2** | A9 B1 G10 K6 L5 M3 M6 N2 N6 | Use Compactron Adaptor on any position. Connect cap lead to cap of tube. Reject if below 2. |
| **3AT2** | A9 B1 G10 K7 L5 M4 M6 N2 N6 | Use Compactron Adaptor on any position. Connect cap lead to cap of tube. Reject if below 3. |
| **3BF2** | A1 B9 G10 K4 L5 M5 M6 N2 N6 | Use Compactron Adaptor on Position V. Connect cap lead to tube cap. Reject if below 3. |
| **4HA7** Triode Unit 1 | A1 B6 B9 C4 D7 G8 I6 I10 J7 K7 K8 L1 M4 M6 N1 N6 | Use Compactron Adaptor on Position X. |
| **4HA7** Triode Unit 2 | A1 B6 B9 C3 D10 G2 I6 I10 J2 K7 K9 L1 M4 M6 N1 N6 | Use Compactron Adaptor on Position X. Depress Special Leakage/Gas Button in gas test. |
| **4HC7** Triode Unit 1 | A1 B9 C2 D7 G8 I6 I10 J2 K7 K8 L1 L6 L7 M4 M6 N1 N6 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| **4HC7** Triode Unit 2 | A1 B9 C3 D10 G2 I6 I10 J2 K7 K9 L1 M4 M6 N1 N6 | Use Compactron Adaptor on Position X. Depress Special Leakage/Gas Button in gas test. |
| **5AZ3** | A1 B9 F3 G7 K1 L5 L6 L10 M5 M10 N2 N9 | Test P1 and P2. Reject if below 4. Use Compactron Adaptor on Position V. |
| **5BC3** | A1 B3 F5 G9 K1 L5 L6 L10 M4 M10 N2 N9 | Use Novar Adaptor. Test P1 and P2. |
| **5HA7** Triode Unit 1 | A1 B6 B9 C4 D7 G8 I6 I10 J7 K7 K8 L1 M4 M10 N1 N9 | Use Compactron Adaptor on Position X. |
| **5HA7** Triode Unit 2 | A1 B6 B9 C3 D10 G2 I6 I10 J2 K7 K9 L1 M4 M10 N1 N9 | Use Compactron Adaptor on Position X. Depress Special Leakage/Gas Button in gas test. |
| **5HC7** Triode Unit 1 | A1 B9 C2 D7 G8 I6 I10 J2 K7 K8 L1 L6 L7 M4 M10 N1 N9 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| **5HC7** Triode Unit 2 | A1 B9 C3 D10 G2 I6 I10 J2 K7 K9 L1 M4 M10 N1 N9 | Use Compactron Adaptor on Position X. Depress Special Leakage/Gas Button in gas test. |
| **6AC9** Diode Unit | A1 B9 C3 F2 G4 K1 L3 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Test P1 and P2. Reject if below 2. |
| **6AC9** Pentode Unit | A1 B9 C5 C6 D7 E8 G10 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. |
| **6AF11** Triode Unit 1 | A1 B9 C5 D6 G8 I6 I10 J2 K6 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. Depress Special Leakage/Gas Button on gas test. |
| **6AF11** Triode Unit 2 | A1 B9 C7 D3 G4 I7 I10 J1 K7 K8 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. |
| **6AF11** Pentode Unit | A1 B9 C7 D10 E8 G2 I7 I10 J1 K6 K7 L1 L6 L8 M3 M10 N1 N9 | Use Compactron Adaptor on Position X. |
| **6AG11** Diode Unit | A1 B9 C2 C10 F3 G8 I6 I10 K2 L3 M5 M10 N2 N9 | Use Compactron Adaptor on Position X. Test P1 and P2. Reject if below 2. |
| **6AG11** Triode Unit | A1 B9 C4 C10 D5 D8 F6 G7 I6 I10 J2 K5 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position W. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| **6AL11** Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J5 K4 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. |
| **6AL11** Pentode Unit 2 | A1 B4 B5 B9 C2 D3 E7 G6 J3 K9 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. Reject if below 3. |
| **6AR11** Pentode Unit 1 | A1 B5 B9 C10 D8 E7 G6 I7 I10 J1 K3 K4 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| **6AR11** Pentode Unit 2 | A1 B4 B9 C6 D5 E3 G2 I7 I10 J1 K3 K4 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Depress Special Leakage/Gas Button in gas test. |
| **6AS11** Triode Unit | A1 B2 B9 B10 C5 C7 D3 D6 F4 G8 I7 I9 J1 K5 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. Test P1 and P2. Reject if P2 is below 2. |
| **6AS11** Pentode Unit | A1 B9 C7 D10 E4 E8 G2 I7 I10 J1 K2 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position X. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6AV11 Triode Unit 1 and 3 | A1 B6 B9 C3 C4 D7 D10 F2 G8 I6 I10 J5 K9 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position X. Test P1 and P2. |
| 6AV11 Triode Unit 2 | A1 B9 C6 D7 G5 I6 I10 J5 K9 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Test P1 Only. |
| 6AX3 | A1 B9 C6 G3 G10 I6 I10 K1 L4 L6 L9 M4 M10 N2 N9 | Use Compactron Adaptor on Position Y. Reject if below 4. |
| 6AY3 | A4 B5 C9 G2 G7 I6 I10 K7 L4 L6 L10 M4 M10 N2 N9 | Use Novar Adaptor. Reject if below 4. |
| 6AY11 Triode Units | A1 B9 C4 C10 D5 D8 F6 G7 I6 I10 J2 K6 K7 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position W. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6AY11 Diode Units | A1 B9 C2 C10 F3 G8 I6 I10 K3 L3 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position X. Test P1 and P2. Reject if below 2. |
| 6B10 Triode Units | A1 B9 C2 C7 D3 D5 F4 G6 I6 I10 J5 K9 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position W. Test P1 and P2. |
| 6B10 Diode Units | A1 B9 C7 F6 G8 I6 I10 K4 K5 L3 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. Test P1 and P2. Reject if below 3. |
| 6BA3 | A4 B5 C9 G2 G7 I6 I10 K1 L4 L6 L9 M4 M10 N2 N9 | Use Novar Adaptor. Reject if below 3. |
| 6BA11 Pentode Unit | A1 B5 B7 B9 B10 C8 D4 E3 F2 G6 I6 I10 J2 K8 K9 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Test P1 and P2. Reject if below 3. |
| 6BA11 Triode Unit | A1 B9 C8 D7 G10 I6 I10 J7 K7 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position X. |
| 6BD11 Pentode Unit | A1 B9 C7 D10 E8 G2 I7 I9 J1 K1 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position X. |
| 6BD11 Triode Unit 1 | A1 B9 C4 D5 G7 I8 I10 J1 K5 K6 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Y. |
| 6BD11 Triode Unit 2 | A1 B9 C6 D2 G3 I8 I10 J1 K6 K8 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Y. |
| 6BE3 | A1 B9 C6 G3 G10 I6 I10 K4 L4 L6 L10 M4 M10 N2 N9 | Use Compactron Adaptor on Position Y. Reject if below 4. |
| 6BF11 Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J8 K7 K8 L1 L6 L8 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. |
| 6BF11 Pentode Unit 2 | A1 B4 B5 B9 C2 D3 E7 G6 J3 K9 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. Reject if below 3. |
| 6BH3 | A4 B5 C9 G2 G7 16 I10 K7 L4 L6 L10 M4 M10 N2 N9 | Use Novar Adaptor. Reject if below 4. |
| 6BH11 Triode Units | A1 B9 C2 C5 D4 D6 F3 G7 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Test P1 and P2. |
| 6BH11 Pentode Unit | A1 B9 C10 D6 E7 G8 I6 I10 J2 K3 K4 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. |
| 6BJ3 | A1 B9 C6 G3 G10 I6 I10 K5 L4 L6 L10 M3 M10 N1 N9 | Use Compactron Adaptor on Position Y. Reject if below 3. |
| 6BK11 Triode Unit 1 | A1 B9 C4 D7 G8 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position X. Depress Special Leakage/Gas Button in gas test. |
| 6BK11 Triode Units 2 and 3 | A1 B9 C3 C6 D7 D10 F2 G5 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6BN11 Pentode Unit 1 | A1 B4 B9 C6 C8 D5 E7 G10 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. |
| 6BN11 Pentode Unit 2 | A1 B9 C2 C6 D3 E4 G5 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position W. |
| 6BS3 | A4 B5 C9 G2 G7 I6 I10 K1 L3 L6 L7 M4 M10 N2 N9 | Use Novar Adaptor. Reject if below 3. |
| *6C9 | A4 B5 C3 C10 D2 D7 D9 F6 G8 H1 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | Use 10 Pin Adaptor. Test P1, P2 and P3. |
| 6C10 Triode Units 1 and 2 | A1 B7 B9 C3 C5 D6 D8 F4 G10 I6 I10 J2 K8 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position Y. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6C10 Triode Unit 3 | A1 B6 B9 C3 D10 G2 I6 I10 J2 K8 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position X. Test P1 only. Depress Special Leakage/Gas Button in gas test. |
| 6CD3 | Use 6CE3 Data. | |
| 6CE3 | A1 B9 C7 G4 I6 I10 K2 L3 L6 L8 M4 M10 N2 N9 | Use Compactron Adaptor on Position V. Reject if below 3. |
| 6D10 Triode Units 1 and 2 | A1 B7 B9 C3 C5 D6 D8 F4 G10 I6 I10 J2 K7 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Y. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6D10 Triode Unit 3 | A1 B6 B9 C3 D10 G2 I6 I10 J2 K7 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position X. Test P1 only. Depress Special Leakage/Gas Button in gas test. |
| 6DW4 | A4 B5 C9 G2 G7 I6 I10 K4 L4 L6 L10 M4 M10 N2 N9 | Use Novar Adaptor. |
| 6FJ7 Triode Unit 1 | A1 B9 C7 D8 G10 I6 I10 J5 K4 K5 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. |
| 6FJ7 Triode Unit 2 | A1 B9 C7 D3 G5 I6 I10 J6 K5 K6 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. |
| 6FM7 Triode Unit 1 | A1 B9 C7 D8 G10 I6 I10 J2 K5 K6 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| 6FM7 Triode Unit 2 | A1 B9 C6 D2 D7 G4 I6 I10 J10 K4 K5 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Y. |

* Indicates corrected punch data. Discard any punch information published previously on this tube-type.

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6FY7 Triode Unit 1 | A1 B9 C7 D8 G10 I6 I10 J2 K7 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| 6FY7 Triode Unit 2 | A1 B9 C6 D2 G4 I6 I10 J10 K4 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Y. |
| 6G11 Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J9 K3 K4 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. |
| 6G11 Pentode Unit 2 | A1 B5 B9 C2 C4 D3 E7 G6 J1 K8 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position V. |
| 6GA7 Diode Unit | A1 B9 C6 G10 I6 I10 K1 L4 L6 L9 M4 M10 N2 N9 | Use Compactron Adaptor on Position Z. Reject if below 3. |
| 6GA7 Pentode Unit | A1 B9 C5 D4 E2 E3 G7 I7 I10 J10 K5 L1 L6 L7 M4 M10 N2 N9 | Use Compactron Adaptor on Position V. |
| 6GB5 | A4 B5 C3 C8 D1 D2 E6 E7 G10 I6 I10 J10 K6 K7 L1 L6 L8 M4 M10 N2 N9 | Use Novar Adaptor. |
| 6GE5 | A1 B9 C4 D3 D10 E2 G7 I6 I10 J10 K3 K5 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position V. |
| 6GF5 | A1 B9 C4 D3 E2 G7 I6 I10 J10 K3 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. |
| 6GF7 Triode Unit 1 | A4 B5 C1 D9 G8 I6 I10 J2 K6 K7 L1 M3 M10 N1 N9 | Use Novar Adaptor. Depress Special Leakage/Gas Button in gas test. |
| 6GF7 Triode Unit 2 | A4 B5 C3 D2 G6 I6 I10 J10 K4 L1 L6 L7 M3 M10 N1 N9 | Use Novar Adaptor. |
| 6GJ5 | A4 B5 C3 D2 D6 E1 E7 G10 I7 I10 J10 K9 L1 L6 L8 M4 M10 N2 N9 | Use Novar Adaptor. |
| 6GT5 | A4 B5 C3 D2 D6 E1 E7 G9 I6 I10 J10 K3 L1 L6 L7 M4 M10 N2 N9 | Use Novar Adaptor. |
| 6GV5 | A1 B9 C4 D5 E3 E7 G10 I8 I10 J10 K5 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. Connect cap lead to cap of tube. |
| 6GY5 | A1 B9 C2 C8 D3 D7 E5 G10 I6 I10 J10 K7 L1 L6 L8 M4 M10 N2 N9 | Use Compactron Adaptor on Position Z. Connect cap lead to tube cap. |
| 6HB5 | A1 B9 C4 D3 E2 G7 I8 I9 J10 K3 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. |
| 6HD5 | A1 B9 C4 D3 E5 G7 I7 I9 J10 K2 L1 L6 L7 M4 M10 N2 N9 | Use Compactron Adaptor on Position V. |
| 6HE5 | A1 B9 C4 C10 D2 E3 G6 I6 I10 J8 K6 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position V. |
| 6HE7 Diode Unit | A1 B9 C4 G2 I6 I10 K2 K3 L4 L6 L10 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Reject if below 4. |
| 6HE7 Pentode Unit | A1 B9 C6 D7 E10 G3 I6 I10 J10 K6 K7 L1 L6 L8 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. |
| 6HF5 | A1 B9 C4 D5 E3 E6 E8 G10 I8 I10 J10 K3 K4 L1 L6 L7 M4 M10 N2 N9 | Use Compactron Adaptor on Position W. Connect cap lead to cap of tube. |
| 6HJ5 | A1 B4 B9 C2 D3 E5 G7 I7 I9 J10 K2 L1 L6 L7 M4 M10 N2 N9 | Use Compactron Adaptor on Position V. |
| *6J10 Discriminator Pentode Unit | A1 B9 C6 D3 D5 E4 G2 J1 K10 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. Reject if below 2. Ignore gas test. |
| 6J10 Audio Pentode Unit | A1 B9 C3 D10 E2 G7 I6 I10 J6 K5 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position X. |
| 6J11 Pentode Unit 1 | A1 B2 B8 B9 C6 D10 E5 G7 I7 I10 J1 K1 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| 6J11 Pentode Unit 2 | A1 B4 B9 C6 D5 E2 G3 I7 I10 J1 K1 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position V. Depress Special Leakage/Gas Button in gas test. |
| 6JB6 | A4 B5 C3 C8 D2 E1 E7 G10 17 I10 J10 K9 L1 L6 L8 M4 M10 N2 N9 | Use Novar Adaptor. |
| 6JE6 | A4 B5 C3 D2 E7 G10 I6 I8 J10 K4 L1 L6 L7 M4 M10 N2 N9 | Use Novar Adaptor. |
| 6JF6 | A4 B5 C3 D2 E7 G10 I6 I8 J9 K4 L1 L6 L7 M4 M10 N2 N9 | Use Novar Adaptor. |
| 6JM6 | A1 B4 B9 C2 D5 E3 G10 I6 I10 J10 K2 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position X. Place cap lead on tube cap. |
| 6JN6 | A1 B4 B9 C2 D10 E3 G7 I6 I10 J10 K2 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. |
| 6JS6 | A1 B9 C2 C4 C8 D5 E3 G10 I6 I10 J10 K5 K7 L1 L6 L8 M4 M10 N2 N9 | Use Compactron Adaptor on Position X. Connect cap lead to tube cap. |
| 6JT6 | A4 B5 B6 C3 D2 E1 E7 G9 I6 I9 J10 K4 K5 L1 L6 L7 M3 M10 N1 N9 | Use Novar Adaptor. |
| 6JZ8 Triode Unit | A1 B9 C10 D8 G2 I6 I10 J6 K6 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position X. |
| 6JZ8 Pentode Unit | A1 B9 C7 D4 D5 E6 G2 I6 I10 J9 K3 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. |
| 6K11 Triode Unit 1 | A1 B7 B9 C3 D8 G10 I6 I10 J6 K5 K6 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position Y. |
| 6K11 Triode Units 2 and 3 | A1 B8 B9 C3 C6 D7 D10 F2 G5 I6 I10 J2 K7 K9 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position V. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6KM6 | A4 B5 B8 C3 D2 D6 E1 E7 G10 I6 I9 J10 K2 L1 L6 L7 M3 M10 N1 N9 | Use Novar Adaptor. |
| 6KY8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J9 K1 K2 L1 L6 L7 M5 M10 N2 N9 | Use Novar Adaptor. |
| 6KY8 Triode Unit | A4 B5 C1 D9 G8 I6 I10 J2 K8 L1 M5 M10 N2 N9 | Use Novar Adaptor. Depress Special Leakage/Gas Button in gas test. |
| 6LR8 Triode Unit | A4 B5 C1 D9 G8 I6 I10 J2 K5 L1 L6 L7 M3 M10 N1 N9 | Use Novar Adaptor. Depress Special Leakage/Gas Button in gas test. |
| 6LR8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J10 K9 L1 L6 L8 M3 M10 N1 N9 | Use Novar Adaptor. |
| 6LU8 Triode Unit | A1 B9 C10 D8 G2 I6 I10 J3 K7 L1 L6 L7 M4 M10 N2 N9 | Use Compactron Adaptor on Position X. Depress Special Leakage/Gas Button in gas test. |

* Indicates corrected punch data. Discard any punch information published previously on this tube-type.

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6LU8 Pentode Unit | A1 B9 C10 D6 D7 E8 G4 I6 I10 J9 K7 L1 L6 L8 M4 M10 N2 N9 | Use Compactron Adaptor on Position W. |
| 6M11 Triode Units | A1 B9 C4 C10 D5 D8 F6 G7 I6 I10 J2 K5 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position W. Test P1 and P2. |
| 6M11 Pentode Units | A1 B9 C8 D2 E3 G10 I7 I10 J1 K1 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position X. |
| 6Q11 Triode Unit 1 | A1 B6 B9 C2 D7 G8 I6 I10 J2 K2 K3 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. |
| 6Q11 Triode Units 2, 3 | A1 B8 B9 C3 C6 D7 D10 F2 G5 I6 I10 J2 K7 K9 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 6T9 Triode Unit | A1 B6 B9 C5 D4 G2 I6 I10 J2 K6 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Depress Special Leakage/Gas Button in gas test. |
| 6T9 Pentode Unit | A1 B9 C7 D6 E8 G10 I6 I10 J5 K3 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. |
| 6T10 Pentode Unit 1 | A1 B9 C7 D6 E8 G10 I6 I10 J5 K3 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on Position Z. |
| 6T10 Pentode Unit 2 | A1 B9 C2 D3 D5 E6 G7 J1 K7 L1 M3 M10 N1 N9 | Use Compactron Adaptor on Position V. |
| 6U10 Triode Units 1 and 3 | A1 B9 C3 C4 D7 D10 F2 G8 I8 I10 J5 K2 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position X. Test P1 and P2. |
| 6U10 Triode Unit 2 | A1 B9 C6 D7 G5 I6 I10 J2 K9 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position V. Test P1 only. Depress Special Leakage/Gas Button in gas test. |
| 6Y10 Pentode Unit 1 | A1 B9 C7 D6 E8 G10 I7 I9 J1 K6 K8 L1 L6 L8 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. |
| 6Y10 Pentode Unit 2 | A1 B5 B9 C2 D3 E6 G7 J1 K6 L1 M5 M10 N2 N9 | Use Compactron Adaptor on Position W. |
| 8AC9 Diode Unit | A1 B9 C3 F2 G4 K1 L3 M5 M10 N3 N9 | Use Compactron Adaptor on Position V. Test P1 and P2. Reject if below 2. |
| 8AC9 Pentode Unit | A1 B9 C5 C6 D7 E8 G10 I6 I10 J2 K2 L1 L6 L7 M5 M10 N3 N9 | Use Compactron Adaptor on Position Z. |
| 8B10 Triode Unit | A1 B9 C2 C7 D3 D5 F4 G6 I6 I10 J5 K9 L1 L6 L7 M5 M10 N3 N9 | Use Compactron Adaptor on Position W. Test P1 and P2. |
| 8B10 Diode Unit | A1 B9 C7 F6 G8 I6 I10 K4 K5 L3 L6 L7 M5 M10 N3 N9 | Use Compactron Adaptor on Position Z. Test P1 and P2. Reject if below 3. |
| 8BM11 Pentode Unit 1 | A1 B9 C6 C8 D10 E7 G5 I7 I10 J1 K4 L1 L6 L7 M5 M10 N3 N9 | Use Compactron Adaptor on Position Z. |
| 8BM11 Pentode Unit 2 | A1 B9 C4 C5 D6 E3 G2 I7 I9 J1 K3 L1 L6 L7 M5 M10 N3 N9 | Use Compactron Adaptor on Position W. |
| 9BJ11 Pentode Unit 1 | A1 B2 B9 C6 C8 D10 E7 G5 I6 I10 J1 K6 L1 L6 L7 M5 M10 N5 N9 | Use Compactron Adaptor on Position Z. |
| 9BJ11 Pentode Unit 2 | A1 B9 C4 C5 D6 E3 G2 I8 I10 J1 K3 L1 L6 L7 M5 M10 N5 N9 | Use Compactron Adaptor on Position W. |
| 10AL11 Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J5 K4 L1 L6 L7 M5 M10 N5 N9 | Use Compactron Adaptor on Position Z. |
| 10AL11 Pentode Unit 2 | A1 B4 B5 B9 C2 D3 E7 G6 J3 K9 L1 M5 M10 N5 N9 | Use Compactron Adaptor on Position W. Reject if below 3. |
| 10GF7 Triode Unit 1 | A4 B5 C1 D9 G8 I6 I10 J2 K6 K7 L1 M5 M10 N5 N9 | Use Novar Adaptor. Depress Special Leakage/Gas Button in gas test. |
| 10GF7 Triode Unit 2 | A4 B5 C3 D2 G6 I6 I10 J10 K4 L1 L6 L7 M5 M10 N5 N9 | |
| 11AR11 Pentode Unit 1 | A1 B5 B9 C10 D8 E7 G6 I7 I10 J1 K3 K4 L1 L6 L7 M1 M10 N2 N9 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| 11AR11 Pentode Unit 2 | A1 B4 B9 C6 D5 E3 G2 I7 I10 J1 K3 K4 L1 L6 L7 M1 M10 N2 N9 | Use Compactron Adaptor on Position V. Depress Special Leakage/Gas Button in gas test. |
| 11BQ11 Pentode Unit 1 | A1 B2 B9 C5 C10 D8 E7 G6 I7 I10 J1 K2 L1 L6 L7 M3 M10 N5 N9 | Use Compactron Adaptor on Position Z. |
| 11BQ11 Pentode Unit 2 | A1 B7 B9 C4 C6 D5 E3 G2 I7 I10 J1 K7 L1 L6 L8 M3 M10 N5 N9 | Use Compactron Adaptor on Position W. |
| 12AL11 Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J5 K4 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on Position Z. |
| 12AL11 Pentode Unit 2 | A1 B4 B5 B9 C2 D3 E7 G6 J3 K9 L1 M2 M10 N4 N9 | Use Compactron Adaptor on Position W. Reject if below 3. |
| 12AX3 | A1 B9 C6 G3 G10 I6 I10 K1 L4 L6 L9 M2 M10 N4 N9 | Use Compactron Adaptor on Position Y. Reject if below 4. |
| 12AY3 | A4 B5 C9 G2 G7 I6 I10 K7 L4 L6 L10 M2 M10 N4 N9 | Use Novar Adaptor. Reject if below 4. |
| 12BE3 | A1 B9 C6 G3 G10 I6 I10 K4 L4 L6 L10 M2 M10 N4 N9 | Use Compactron Adaptor on Position Y. Reject if below 4. |
| 12BS3 | A4 B5 C9 G2 G7 I6 I10 K1 L3 L6 L7 M2 M10 N4 N9 | Use Novar Adaptor. Reject if below 3. |
| 12BT3 | A1 B9 C5 G2 G8 I6 I10 K4 L4 L6 L10 M2 M10 N4 N9 | Use Compactron Adaptor on Position Z. Reject if below 3. |
| 12G11 Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J9 K3 K4 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on Position Z. |
| 12G11 Pentode Unit 2 | A1 B5 B9 C2 C4 D3 E7 G6 J1 K8 L1 M2 M10 N4 N9 | Use Compactron Adaptor on Position V. |
| 12GE5 | A1 B9 C4 D3 D10 E2 G7 I6 I10 J10 K3 K5 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on Position V. |
| 12GJ5 | A4 B5 C3 D2 D6 E1 E7 G10 I7 I10 J10 K9 L1 L6 L8 M2 M10 N3 N9 | Use Novar Adaptor. |
| 12GT5 | A4 B5 C3 D2 D6 E1 E7 G9 I6 I10 J10 K3 L1 L6 L7 M2 M10 N4 N9 | Use Novar Adaptor. |
| 12HE7 Diode Unit | A1 B9 C4 G2 I6 I10 K2 K3 L4 L6 L10 M2 M10 N4 N9 | Use Compactron Adaptor on Position V. Reject if below 4. |
| 12HE7 Pentode Unit | A1 B9 C6 D7 E10 G3 I6 I10 J10 K6 K7 L1 L6 L8 M2 M10 N4 N9 | Use Compactron Adaptor on Position Z. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 12JB6 | A4 B5 C3 C8 D2 E1 E7 G10 I7 I10 J10 K9 L1 L6 L8 M2 M10 N3 N9 | Use Novar Adaptor. |
| 12JN6 | A1 B4 B9 C2 D10 E3 G7 I6 I10 J10 K2 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on Position V. |
| 12JT6 | A4 B5 B6 C3 D2 E1 E7 G9 I6 I9 J10 K4 K5 L1 L6 L7 M2 M10 N4 N9 | Use Novar Adaptor. |
| 12T10 Pentode Unit 1 | A1 B9 C7 D6 E8 G10 I6 I10 J5 K3 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on Position Z. |
| 12T10 Pentode Unit 2 | A1 B9 C2 D3 D5 E6 G7 J1 K7 L1 M2 M10 N4 N9 | Use Compactron Adaptor on Position V. |
| 13FM7 Triode Unit 1 | A1 B9 C7 D8 G10 I6 I10 J2 K5 K6 L1 M1 M10 N3 N9 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| 13FM7 Triode Unit 2 | A1 B9 C6 D2 D7 G4 I6 I10 J10 K4 K5 L1 L6 L7 M1 M10 N3 N9 | Use Compactron Adaptor on Position Y. |
| 13GF7 Triode Unit 1 | A4 B5 C1 D9 G8 I6 I10 J2 K6 K7 L1 M2 M10 N5 N9 | Use Novar Adaptor. Depress Special Leakage/Gas Button in gas test. |
| 13GF7 Triode Unit 2 | A4 B5 C3 D2 G6 I6 I10 J10 K4 L1 L6 L7 M2 M10 N5 N9 | |
| 13J10 Discriminator Pentode Unit | A1 B9 C6 D3 D5 E4 G2 J1 K10 L1 M1 M10 N3 N9 | Use Compactron Adaptor on Position Z. Reject if below 2. Ignore gas test. |
| 13J10 Audio Pentode Unit | A1 B9 C3 D10 E2 G7 I6 I10 J6 K5 L1 L6 L7 M1 M10 N3 N9 | Use Compactron Adaptor on Position X. |
| 14BL11 Pentode Unit | A1 B9 C6 D10 E8 G2 I7 I10 J1 K4 L1 L6 L8 M1 M10 N4 N9 | Use Compactron Adaptor on Position X. |
| 14BL11 Triode Unit 1 | A1 B9 C6 D5 G7 I8 I10 J1 K6 L1 L6 L7 M1 M10 N4 N9 | Use Compactron Adaptor on Position W. |
| 14BL11 Triode Unit 2 | A1 B9 C4 D3 G10 I7 I8 J1 K5 L1 L6 L7 M1 M10 N4 N9 | Use Compactron Adaptor on Position W. |
| 14BR11 Pentode Unit | A1 B9 C4 C5 D2 E3 G10 I7 I9 J1 K1 L1 L6 L7 M1 M10 N4 N9 | Use Compactron Adaptor on Position X. |
| 14BR11 Triode Unit 1 | A1 B9 C5 D8 G7 I6 I10 J2 K7 L1 L6 L7 M1 M10 N4 N9 | Use Compactron Adaptor on Position Z. |
| 14BR11 Triode Unit 2 | A1 B9 C3 D6 G4 I7 I9 J1 K6 L1 L6 L7 M1 M10 N4 N9 | Use Compactron Adaptor on Position Z. |
| 15AF11 Pentode Unit | A1 B9 C7 D10 E8 G2 I7 I10 J1 K6 K7 L1 L6 L8 M1 M10 N5 N9 | Use Compactron Adaptor on Position X. |
| 15AF11 Triode Unit 1 | A1 B9 C5 D6 G8 I6 I10 J2 K6 L1 L6 L7 M1 M10 N5 N9 | Use Compactron Adaptor on Position W. Depress Special Leakage/Gas Button in gas test. |
| 15AF11 Triode Unit 2 | A1 B9 C7 D3 G4 I7 I10 J1 K7 K8 L1 L6 L7 M1 M10 N5 N9 | Use Compactron Adaptor on Position W. |
| 15BD11 Pentode Unit | A1 B9 C7 D10 E8 G2 I7 I9 J1 K1 L1 L6 L7 M1 M10 N5 N9 | Use Compactron Adaptor on Position X. |
| 15BD11 Triode Unit 1 | A1 B9 C4 D5 G7 I8 I10 J1 K5 K6 L1 L6 L7 M1 M10 N5 N9 | Use Compactron Adaptor on Position Y. |
| 15BD11 Triode Unit 2 | A1 B9 C6 D2 G3 I8 I10 J1 K6 K8 L1 L6 L7 M1 M10 N5 N9 | Use Compactron Adaptor on Position Y. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 15FM7 Triode Unit 1 | A1 B9 C7 D8 G10 I6 I10 J2 K5 K6 L1 M5 M9 N1 N8 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| 15FM7 Triode Unit 2 | A1 B9 C6 D2 D7 G4 I6 I10 J10 K4 K5 L1 L6 L7 M5 M9 N1 N8 | Use Compactron Adaptor on Position Y. |
| 15FY7 Triode Unit 1 | A1 B9 C7 D8 G10 I6 I10 J2 K7 L1 M5 M9 N1 N8 | Use Compactron Adaptor on Position Z. Depress Special Leakage/Gas Button in gas test. |
| 15FY7 Triode Unit 2 | A1 B9 C6 D2 G4 I6 I10 J10 K4 L1 L6 L7 M5 M9 N1 N8 | Use Compactron Adaptor on Position Y. |
| 15KY8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J9 K1 K2 L1 L6 L7 M5 M9 N1 N8 | Use Novar Adaptor. |
| 15KY8 Triode Unit | A4 B5 C1 D9 G8 I6 I10 J2 K8 L1 M5 M9 N1 N8 | Depress Special Leakage/Gas Button in gas test. |
| 16GY5 | A1 B9 C2 C8 D3 D7 E5 G10 I6 I10 J10 K7 L1 L6 L8 M5 M9 N2 N8 | Use Compactron Adaptor on Position Z. Connect cap lead to tube cap. |
| 16KA6 | A1 B4 B9 C8 D5 E3 G10 I7 I10 J10 K2 L1 L6 L7 M5 M9 N2 N8 | Use Compactron Adaptor on Position X. Connect cap lead to tube cap. |
| 17AX3 | A1 B9 C6 G3 G10 I6 I10 K1 L4 L6 L9 M3 M9 N2 N8 | Use Compactron Adaptor on Position Y. Reject if below 4. |
| 17AY3 | A4 B5 C9 G2 G7 I6 I10 K7 L4 L6 L10 M4 M9 N2 N8 | Use Novar Adaptor. Reject if below 4. |
| 17BE3 | A1 B9 C6 G3 G10 I6 I10 K4 L4 L6 L10 M3 M9 N2 N8 | Use Compactron Adaptor on Position Y. Reject if below 4. |
| 17BF11 Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J8 K7 K8 L1 L6 L8 M3 M9 N2 N8 | Use Compactron Adaptor on Position Z. |
| 17BF11 Pentode Unit 2 | A1 B4 B5 B9 C2 D3 E7 G6 J3 K9 L1 M3 M9 N2 N8 | Use Compactron Adaptor on Position W. Reject if below 3. |
| 17BH3 | A4 B5 C9 G2 G7 I6 I10 K7 L4 L6 L10 M3 M9 N2 N8 | Use Novar Adaptor. Reject if below 4. |
| 17BS3 | A4 B5 C9 G2 G7 I6 I10 K1 L3 L6 L7 M3 M9 N2 N8 | Use Novar Adaptor. Reject if below 3. |
| 17BZ3 | A1 B9 C7 G4 I6 I10 K4 L3 L6 L8 M3 M9 N2 N8 | Use Compactron Adaptor on Position V. Reject if below 3. |
| 17C9 | A4 B5 C6 C10 D1 D7 E2 E8 F3 G9 I6 I10 J5 K6 L1 L6 L7 M4 M9 N2 N8 | Use 10-pin Adaptor in any position. Test P1 and P2. |
| 17GE5 | A1 B9 C4 D3 D10 E2 G7 I6 I10 J10 K3 K5 L1 L6 L7 M3 M9 N2 N8 | Use Compactron Adaptor on Position V. |
| 17GJ5 | A4 B5 C3 D2 D6 E1 E7 G10 I7 I10 J10 K9 L1 L6 L8 M3 M9 N2 N8 | Use Novar Adaptor. |
| 17GT5 | A4 B5 C3 D2 D6 E1 E7 G9 I6 I10 J10 K3 L1 L6 L7 M3 M9 N2 N8 | Use Novar Adaptor. |
| 17GV5 | A1 B9 C4 D5 E3 E7 G10 I8 I10 J10 K5 L1 L6 L7 M4 M9 N2 N8 | Use Compactron Adaptor on Position W. Connect cap lead to cap of tube. |
| 17JB6 | A4 B5 C3 C8 D2 E1 E7 G10 I7 I10 J10 K9 L1 L6 L8 M3 M9 N2 N8 | Use Novar Adaptor. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 17JG6 | A4 B5 C3 C6 D2 E1 E7 G9 I8 I10 J10 K8 L1 L6 L8 M3 M9 N2 N8 | Use Novar Adaptor. |
| 17JM6 | A1 B4 B9 C2 D5 E3 G10 I6 I10 J10 K2 L1 L6 L7 M4 M9 N2 N8 | Use Compactron Adaptor on Position X. Place cap lead on tube cap. |
| 17JN6 | A1 B4 B9 C2 D10 E3 G7 I6 I10 J10 K2 L1 L6 L7 M4 M9 N2 N8 | Use Compactron Adaptor on Position V. |
| 17JT6 | A4 B5 B6 C3 D2 E1 E7 G9 I6 I9 J10 K4 K5 L1 L6 L7 M3 M9 N2 N8 | Use Novar Adaptor. |
| 17JZ8 Triode Unit | A1 B9 C10 D8 G2 I6 I10 J6 K4 L1 M4 M9 N2 N8 | Use Compactron Adaptor on Position X. |
| 17JZ8 Pentode Unit | A1 B9 C10 D6 D7 E8 G4 I6 I10 J9 K2 K3 L1 L6 L7 M4 M9 N2 N8 | Use Compactron Adaptor on Position W. |
| 17LD8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J9 K1 K2 L1 L6 L7 M4 M9 N2 N8 | Use Novar Adaptor. |
| 17LD8 Triode Unit | A4 B5 C1 D9 G8 I6 I10 J2 K8 L1 M4 M9 N2 N8 | Use Novar Adaptor. Depress Special Leakage/Gas Button in gas test. |
| 17X10 Pentode Unit 1 | A1 B9 C5 C8 D7 E6 G4 J1 K7 L1 M3 M9 N2 N8 | Use Compactron Adaptor on Position V. Depress Special Leakage/Gas Button in gas test. |
| 17X10 Pentode Unit 2 | A1 B6 B9 C3 D10 E2 G7 I6 I10 J8 K2 L1 L6 L7 M3 M9 N2 N8 | Use Compactron Adaptor on Position X. |
| 18GB5 | A4 B5 C3 C8 D1 D2 E6 E7 G10 I6 I10 J10 K6 K7 L1 L6 L8 M5 M9 N3 N8 | Use Novar Adaptor. |
| 21GY5 | A1 B9 C4 C8 D5 D7 E3 G10 J10 K9 L1 L6 L8 M2 M9 N3 N8 | Use Compactron Adaptor on Position X. Connect cap lead of tester to tube cap rather than to adaptor. |
| 21HB5 | A1 B9 C4 D3 E2 G7 I8 I9 J10 K3 L1 L6 L7 M2 M9 N3 N8 | Use Compactron Adaptor on Position W. |
| 21HD5 | A1 B9 C4 D3 E5 G7 I7 I9 J10 K2 L1 L6 L7 M2 M9 N3 N8 | Use Compactron Adaptor on Position V. |
| 21HJ5 | A1 B4 B9 C2 D3 E5 G7 I7 I9 J10 K2 L1 L6 L7 M2 M9 N3 N8 | Use Compactron Adaptor on Position V. |
| 21JZ6 | A1 B4 B9 C2 D5 E3 G10 I7 I10 J10 K3 L1 L6 L7 M2 M9 N3 N8 | Use Compactron Adaptor on Position X. Connect cap lead to tube cap. |
| 21KA6 | A1 B4 B9 C8 D5 E3 G10 I7 I10 J10 K2 L1 L6 L7 M2 M9 N3 N8 | Use Compactron Adaptor on Position X. Connect cap lead to tube cap. |
| 21LR8 Triode Unit | A4 B5 C1 D9 G8 I6 I10 J2 K5 L1 L6 L7 M2 M9 N3 N8 | Use Novar Adaptor. Depress Special Leakage/Gas Button in gas test. |
| 21LR8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J10 K9 L1 L6 L8 M2 M9 N3 N8 | Use Novar Adaptor. |
| 21LU8 Triode Unit | A1 B9 C10 D8 G2 I6 I10 J3 K7 L1 L6 L7 M2 M9 N3 N8 | Use Compactron Adaptor on Position X. Depress Special Leakage/Gas Button in gas test. |
| 21LU8 Pentode Unit | A1 B9 C10 D6 D7 E8 G4 I6 I10 J9 K7 L1 L6 L8 M2 M9 N3 N8 | Use Compactron Adaptor on Position W. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 22BH3 | A4 B5 C9 G2 G7 I6 I10 K7 L4 L6 L10 M2 M9 N3 N8 | Use Novar Adaptor. Reject if below 4. |
| 22BW3 | A1 B9 C7 G4 I6 I10 K5 K6 L4 L6 L10 M1 M9 N3 N8 | Use Compactron Adaptor on Position V. Reject if below 3. |
| 22JF6 | A4 B5 C3 D2 E7 G10 I6 I8 J9 K4 L1 L6 L7 M2 M9 N4 N8 | Use Novar Adaptor. |
| 22JG6 | A4 B5 C3 C6 D2 E1 E7 G9 I8 I10 J10 K8 L1 L6 L8 M2 M9 N3 N8 | Use Novar Adaptor. |
| 22JU6 | A4 B5 C3 C8 D2 D6 E1 E7 G10 I6 I10 J10 K5 K6 L1 L6 L8 M2 M9 N4 N8 | Use Novar Adaptor. |
| 23Z9 Pentode Unit | A1 B9 C5 D6 E7 G3 I6 I10 J9 K2 L1 L6 L7 M1 M9 N3 N8 | Use Compactron Adaptor on Position Z. |
| 23Z9 Triode Unit 1 | A1 B9 C5 D8 G10 I6 I10 J3 K7 L1 L6 L7 M1 M9 N3 N8 | Use Compactron Adaptor on Position Z. |
| 23Z9 Triode Unit 2 | A1 B9 C7 D3 G2 I6 I10 J6 K4 L1 M1 M9 N3 N8 | Use Compactron Adaptor on Position V. |
| 27GB5 | A4 B5 C3 C8 D1 D2 E6 E7 G10 I6 I10 J10 K6 K7 L1 L6 L8 M3 M10 N2 N8 | Use Novar Adaptor. |
| 28GB5 | A4 B5 C3 C8 D1 D2 E6 E7 G10 I6 I10 J10 K6 K7 L1 L6 L8 M4 M10 N3 N8 | Use Novar Adaptor. |
| 28HD5 | A1 B9 C4 D3 E5 G7 I7 I9 J10 K2 L1 L6 L7 M5 M10 N3 N8 | Use Compactron Adaptor on Position V. |
| 30AG11 Diode Unit | A1 B9 C2 C10 F3 G8 I6 I10 K2 L3 M5 M10 N5 N8 | Use Compactron Adaptor on Position X. Test P1 and P2. Reject if below 2. |
| 30AG11 Triode Unit | A1 B9 C4 C10 D5 D8 F6 G7 I6 I10 J2 K5 L1 L6 L7 M5 M10 N5 N8 | Use Compactron Adaptor on Position W. Test P1 and P2. Depress Special Leakage/Gas Button in gas test. |
| 30HD5 | A1 B9 C4 D3 E5 G7 I7 I9 J10 K2 L1 L6 L7 M4 M10 N5 N8 | Use Compactron Adaptor on Position V. |
| 30HJ5 | A1 B4 B9 C2 D3 E5 G7 I7 I9 J10 K2 L1 L6 L7 M4 M10 N5 N8 | Use Compactron Adaptor on Position V. |
| 31JS6 | A1 B9 C2 C4 C8 D5 E3 G10 I6 I10 J10 K5 K7 L1 L6 L8 M2 M10 N3 N8 | Use Compactron Adaptor on Position X. Connect cap lead to tube cap. |
| 33GT7 Pentode Unit | A1 B9 C6 D7 D10 E8 G3 I7 I9 J10 K4 L1 L6 L7 M1 M10 N4 N8 | Use Compactron Adaptor on Position Z. |
| 33GT7 Diode Unit | A1 B9 C4 G2 I6 I10 K4 L4 L6 L10 M1 M10 N4 N8 | Use Compactron Adaptor on Position V. Reject if below 3. |
| 33GY7 Pentode Unit | A1 B9 C6 D7 D8 E10 G3 I7 I9 J10 K4 L1 L6 L7 M1 M10 N4 N8 | Use Compactron Adaptor on Position Z. |
| 33GY7 Diode Unit | A1 B9 C4 G2 I6 I10 K4 L4 L6 L10 M1 M10 N4 N8 | Use Compactron Adaptor on Position V. Reject if below 3. |
| 33JV6 | A1 B9 C2 C4 D10 E3 G7 I6 I10 J10 K6 K7 L1 L6 L8 M1 M10 N4 N8 | Use Compactron Adaptor on Position V. |
| 34CD3 | A1 B9 C7 G4 I6 I10 K2 L4 L6 L10 M5 M8 N1 N7 | Use Compactron Adaptor on Position W. |
| 34CE3 | A1 B9 C7 G4 I6 I10 K2 L3 L6 L8 M5 M8 N1 N7 | Use Compactron Adaptor on Position V. Reject if below 3. |
| 38HE7 Diode Unit | A1 B9 C4 G2 I6 I10 K2 K3 L4 L6 L10 M5 M8 N5 N7 | Use Compactron Adaptor on Position V. Reject if below 4. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| **38HE7** Pentode Unit | A1 B9 C6 D7 E10 G3 I6 I10 J10 K6 K7 L1 L6 L8 M5 M8 N5 N7 | Use Compactron Adaptor on Position Z. |
| **7868** | A4 B5 C3 D2 D6 E1 E7 G9 I6 I10 J5 K1 K2 L1 L6 L7 M4 M10 N2 N9 | Use Novar Adaptor. Reject if below 4. |
| **7984** | A1 B9 C5 C7 C8 D10 E6 G2 G3 G4 I6 I10 J9 K7 L1 L6 L8 M2 M10 N5 N9 | Use Compactron Adaptor on Position Y. |
| **8113** | Use 6CY5 Data. | |
| **8149** | A1 B9 C7 D8 E2 E6 G4 I6 I10 J10 K3 K4 L1 L6 L7 M2 M10 N5 N9 | Use Compactron Adaptor on Position Z. |
| **8150** | A1 B9 C2 C4 C7 D8 E3 E6 G10 I6 I10 J10 K3 K4 L1 L6 L7 M2 M10 N5 N9 | Use Compactron Adaptor on Position Z. Connect cap lead to tube cap. |
| **8156** | A1 B9 C4 C6 C7 D8 E5 E10 G2 G3 I6 I10 J9 K3 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on Position Z. |
| **8233** | A4 B5 C2 C6 C9 D8 E3 G1 I6 I9 J1 K5 L1 L6 L9 M5 M10 N2 N9 | Use Novar Adaptor. |
| **8278** | A4 B5 C2 C6 D3 D7 E1 G9 I6 I10 J9 K7 L1 L6 L8 M3 M10 N1 N9 | Use Novar Adaptor. |

Information furnished by RCA is believed to be accurate and reliable. However, no responsibility is assumed by RCA for its use; nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of RCA.

# ADDENDA
## TO
# CARD PUNCH DATA BOOKLET FOR THE RCA WT-110A Electron Tube Tester

This card punch data is provided as an addition to the Card Punch Data Booklet, ICE-134, and to Supplement 5 (September, 1965). Test data is included for novar, compactron, and 10-pin tube types. To test these types, an adaptor must be constructed as described in the Supplement.

## CORRECTED PUNCHING DATA

In some copies of the Card Punch Data Booklet, the punching data for the following tube-types is in error. The data in the Booklet should be corrected to agree with the punching information shown below.

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 2HR8 | A4 B5 C2 C3 C7 C8 D9 E1 G6 I6 I10 J4 K7 L1 M3 M6 N2 N6 | Depress special leakage/gas button in gas test. |
| 4EA8 | Change Triode Data so that K1 reads K3. | |
| 4JC6 | Change Data so that F8 reads E8. | |
| 5EA8 | Change Triode Data so that K1 reads K3. | |
| 6BF11 Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J8 K7 K8 L1 L6 L8 M3 M10 N1 N9 | Use Compactron Adaptor on position Z. |
| 6BF11 Pentode Unit 2 | A1 B4 B5 B9 C2 D3 E6 G7 J3 K9 L1 M3 M10 N1 N9 | Use Compactron Adaptor on position W. Reject if below 3. |
| 6EA8 | Change Triode Data so that K1 reads K3. | |
| 6KZ8 Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6KZ8 Triode Unit | A4 B3 B5 C8 D9 G1 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | |

## NEW PUNCHING INFORMATION

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 1AY2 | A1 A2 A3 A4 B6 B7 B8 B9 G10 K8 L5 M5 M6 N3 N6 | Insert base of tube into 9-pin socket. Reject if below 3. |
| 2AZ2 | A1 B2 G10 K7 M3 M6 N2 N6 | Reject if below 3. |
| 2BA2 | A4 B5 G9 K10 L4 M5 M6 N3 N6 | |
| 2BJ2 | A4 B5 G10 K8 L5 L6 L7 M3 M6 N2 N6 | Reject if below 3. |
| 2HQ5 | A3 B4 C2 C6 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M3 M6 N2 N6 | Depress special leakage/gas button in gas test. |
| 3AW2 | A1 B9 G10 K4 L5 L6 L7 M4 M6 N2 N6 | Use Compactron Adaptor on position W. Connect cap lead to tube cap. Reject if below 3. |
| 3BH2 | A4 B5 G10 K1 L5 M4 M6 N2 N6 | Use Novar Adaptor. Reject if below 3. |
| 3HQ5 | A3 B4 C2 C6 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M4 M6 N2 N6 | Depress special leakage/gas button in gas test. |
| 4CX7 | A4 B5 C3 C8 C9 D2 D7 F1 G6 I6 I8 J1 K2 L1 L6 L7 M4 M6 N1 N6 | Test P1 and P2. |
| 4DC8 Diode Unit | A4 B5 C3 F7 G8 I6 I10 K2 L4 M4 M6 N1 N6 | Test P1 and P2. Reject if below 4. |
| 4DC8 Pentode Unit | A4 B5 B9 C3 D2 E1 G6 I6 I10 J4 K6 K7 L1 L6 L7 M4 M6 N1 N6 | |
| 4FS7 Triode Unit | A4 B5 C3 D6 G7 I6 I10 J6 K5 L1 L6 L7 M5 M6 N1 N6 | |
| 4FS7 Pentode Unit | A4 B5 C1 D2 E9 G8 I6 I10 J2 K6 K7 L1 L6 L8 M5 M6 N1 N6 | Depress special leakage/gas button in gas test. |
| 4GX7 Triode Unit | A4 B5 C1 C3 D9 G3 I6 I10 J2 K2 L1 L6 L7 M4 M6 N1 N6 | |
| 4GX7 Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K8 L1 L6 L8 M4 M6 N1 N6 | Depress special leakage/gas button in gas test. |

RADIO CORPORATION OF AMERICA
ELECTRONIC COMPONENTS AND DEVICES
ELECTRONIC INSTRUMENTS HARRISON, NEW JERSEY

Trademark(s) ® Registered
Marca(s) Registrada(s)

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 4HC7 ..... Triode Unit 1 | A1 B9 C2 D7 G8 I6 I10 J2 K7 K8 L1 L6 L7 M4 M6 N1 N6 | Use Compactron Adaptor on Position Z. Depress special leakage/gas button in gas test. |
| 4HC7 ..... Triode Unit 2 | A1 B9 C3 D10 G2 I6 I10 J2 K7 K9 L1 M4 M6 N1 N6 | Use Compactron Adaptor on Position X. Depress special leakage/gas button in gas test. |
| 4HQ5 ..... | A3 B4 C2 C6 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M4 M6 N1 N6 | Depress special leakage/gas button in gas test. |
| 4HR8 ..... | A4 B5 C2 C3 C7 C8 D9 E1 G6 I6 I10 J4 K7 L1 M4 M6 N1 N6 | Depress special leakage/gas button in gas test. |
| 4JH6 ..... | A3 B4 C2 C7 D1 E6 G5 I6 I7 J1 K5 L1 L6 L7 M4 M6 N1 N6 | |
| 4KE8 ..... Triode Unit | A4 B5 B7 C8 D9 G1 I7 I10 J1 K1 L1 L6 L7 M4 M6 N1 N6 | |
| 4KE8 ..... Pentode Unit | A4 B1 B5 C7 D2 E3 G6 I6 I9 J1 K6 L1 L6 L8 M4 M6 N1 N6 | Depress special leakage/gas button in gas test. |
| 4LJ8 ..... Triode Unit | A4 B5 C3 C8 D1 G2 I7 I10 J1 K3 L1 L6 L7 M4 M6 N1 N6 | |
| 4LJ8 ..... Pentode Unit | A4 B5 C3 C8 D9 E7 G6 I6 I9 J1 K7 L1 L6 L8 M4 M6 N1 N6 | Depress special leakage/gas button in gas test. |
| 5GX7 ..... Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J2 K2 L1 L6 L7 M4 M10 N1 N9 | |
| 5GX7 ..... Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K8 L1 L6 L8 M4 M10 N1 N9 | Depress special leakage/gas button in gas test. |
| 5HA7 ..... Triode Unit 1 | A1 B6 B9 C4 D7 G8 I6 I10 J7 K7 K8 L1 M4 M10 N1 N9 | Use Compactron Adaptor on Position X. |
| 5HA7 ..... Triode Unit 2 | A1 B6 B9 C3 D10 G2 I6 I10 J2 K7 K9 L1 M4 M10 N1 N9 | Use Compactron Adaptor on Position X. Depress special leakage/gas button in gas test. |
| 5HB7 ..... Triode Unit | A4 B5 C1 C3 D9 G8 I7 I10 J1 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5HB7 ..... Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K5 L1 L6 L7 M5 M6 N1 N6 | |
| 5HC7 ..... Triode Unit 1 | A1 B9 C2 D7 G8 I6 I10 J2 K7 K8 L1 L6 L7 M4 M10 N1 N9 | Use Compactron Adaptor on Position Z. Depress special leakage/gas button in gas test. |
| 5HC7 ..... Triode Unit 2 | A1 B9 C3 D10 G2 I6 I10 J2 K7 K9 L1 M4 M10 N1 N9 | Use Compactron Adaptor on Position X. Depress special leakage/gas button in gas test. |
| 5HZ6 ..... | A3 B4 B7 C2 D1 E6 G5 I8 I9 J1 K9 L1 L6 L7 M5 M6 N1 N6 | |
| 5KZ8 ..... Pentode Unit | A4 B5 C3 D2 E7 G6 I6 I10 J2 K4 L1 L6 L7 M5 M6 N1 N6 | |
| 5KZ8 ..... Triode Unit | A4 B3 B5 C8 D9 G1 I6 I10 J2 K3 L1 L6 L7 M5 M6 N1 N6 | |
| 5U9 ..... Triode Unit | A5 B6 C1 D10 G9 I6 I10 J4 K6 L1 L6 L7 M4 M10 N1 N9 | Use 10-pin socket adaptor. |
| 5U9 ..... Pentode Unit | A5 B6 B9 C2 C4 D3 E8 G7 I6 I10 J3 K6 L1 L6 L8 M4 M10 N1 N9 | Depress special leakage/gas button in gas test. |
| 5V9 ..... Triode Unit | A5 B6 C9 D8 G10 I6 I10 J3 K2 L1 L6 L7 M5 M10 N1 N9 | Use 10-Pin Socket Adaptor. |
| 5V9 ..... Heptode Unit | A5 B6 B10 C1 D2 D3 E4 G7 I6 I10 J1 K8 L2 M5 M10 N1 N9 | Depress special leakage/gas button in gas test. |
| 5X9 ..... Triode Unit | A5 B6 C1 D10 G9 I6 I10 J2 K7 L1 L6 L7 M4 M10 N1 N9 | Use 10-Pin Socket Adaptor. Depress special leakage/gas button in gas test. |
| 5X9 ..... Pentode Unit | A5 B6 B9 C2 C4 D3 E8 G7 I6 I10 J3 K6 L1 L6 L8 M4 M10 N1 N9 | Depress special leakage/gas button in gas test. |
| 6AC10 ..... Triode Units 1 and 2 | A1 B9 C2 C4 D5 D7 F3 G8 I7 I10 J1 K6 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on position Z. Test P1 and P2. |
| 6AC10 ..... Triode Unit 3 | A1 B9 C3 D10 G2 I7 I10 J1 K6 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on position V. Test P1 only. |
| 6AD10 ..... Pentode Unit 1 | A1 B5 B9 C2 D3 E6 G7 I8 I9 J1 K4 L1 M3 M10 N1 N9 | Use Compactron Adaptor on position V. |
| 6AD10 ..... Pentode Unit 2 | A1 B9 C7 D6 E8 G10 I6 I10 J7 K7 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on position Z. |
| 6BH11 ..... Triode Units | A1 B9 C2 C5 D4 D6 F3 G7 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on position V. Test P1 and P2. |
| 6BH11 ..... Pentode Unit | A1 B9 C10 D6 E7 G8 I6 I10 J2 K3 K4 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on Position Z. |
| 6BT6 ..... | Use 6AV6 Data | |
| 6BU6 ..... Triode Unit | A3 B4 C2 D1 G7 I6 I10 J1 K1 L1 M5 M10 N2 N9 | |
| 6BU6 ..... Diode Unit | A3 B4 C2 F5 G6 I6 I10 K7 L4 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6BW6 ..... | A4 B5 B9 C3 D1 D2 E8 G7 I6 I7 J1 K1 L1 M5 M10 N2 N9 | |
| 6BZ3 ..... | A1 B9 C7 G4 I6 I10 K4 L3 L6 L8 M4 M10 N2 N9 | Use Compactron Adaptor on position V. Reject if below 3. |
| 6CG3 ..... | A1 B9 C6 G3 G10 I6 I10 K1 L4 L6 L10 M3 M10 N1 N9 | Use Compactron Adaptor on position Y. Reject if below 3. |
| 6CH3 ..... | A4 B5 C9 G2 G7 I6 I10 K2 L3 L6 L8 M4 M10 N2 N9 | Reject if below 3. |
| 6CH7 ..... | A4 B5 C3 C8 C9 D2 D7 F1 G6 I6 I8 J1 K2 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6CJ3 ..... | A4 B5 C9 G2 G7 I6 I10 K1 L4 L6 L10 M3 M10 N1 N9 | Use Novar Adaptor. Reject if below 3. |
| 6CK3 ..... | A4 B5 C9 G2 G7 I6 I10 K2 L3 L6 L8 M4 M10 N2 N9 | Use Novar Adaptor. Reject if below 3. |
| 6CL3 ..... | A4 B5 C9 G2 I6 I10 K5 L3 L6 L9 M4 M10 N2 N9 | Use Novar Adaptor. Reject if below 3. |
| 6CS8 ..... Pentode Unit | A4 B5 C3 C8 D2 E7 G6 I6 I8 J1 K9 L1 L6 L8 M5 M10 N2 N9 | |
| 6CS8 ..... Triode Unit | A4 B5 C8 D9 G1 I6 I10 J6 K3 L1 M5 M10 N2 N9 | |
| 6CX7 ..... | Use 6CH7 Data | |
| 6GX7 ..... Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6GX7 ..... Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K8 L1 L6 L8 M5 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| 6HD7 ..... Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6HD7 ..... Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K3 L1 L6 L7 M5 M10 N2 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 6HE7 ..... Diode Unit | A1 B9 C4 G2 I6 I10 K2 K3 L4 L6 L10 M5 M10 N2 N9 | Use Compactron Adaptor on position V. Reject if below 4. |
| 6HE7 ..... Pentode Unit | A1 B9 C6 D7 E10 G3 I6 I10 J10 K6 K7 L1 L6 L8 M5 M10 N2 N9 | Use Compactron Adaptor on position Z. |
| 6HJ7 ..... Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6HJ7 ..... Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6HL5 ..... | A4 B5 C3 D1 D2 E9 G7 I7 I10 J1 K9 L1 L6 L9 M5 M10 N2 N9 | |
| 6HQ5 ..... | A3 B4 C2 C6 C7 D1 G5 I6 I10 J2 K6 K7 L1 L6 L8 M5 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| 6HR5 ..... | A3 B4 C2 D1 D7 E6 G5 I6 I10 J9 K2 L1 M5 M10 N2 N9 | |
| 6J9 ..... | A4 B5 C3 C10 D2 D7 D9 F6 G8 H1 I6 I7 J1 K5 L1 L6 L7 M5 M10 N2 N9 | Test P1, P2 and P3. |
| 6JM6 ..... | A1 B4 B9 C2 D5 E3 G10 I6 I10 J10 K2 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on position X. Place cap lead on tube cap. |
| 6JN6 ..... | A1 B4 B9 C2 D10 E3 G7 I6 I10 J10 K2 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on position V. |
| 6JS6 ..... | A1 B9 C2 C4 C8 D5 E3 G10 I6 I10 J10 K5 K7 L1 L6 L8 M4 M10 N2 N9 | Use Compactron Adaptor on position X. Connect cap lead to tube. |
| 6JU6 ..... | A4 B5 C3 C8 D2 D6 E1 E7 G10 I6 I10 J10 K5 L1 L6 L8 M3 M10 N1 N9 | Use Novar Adaptor. |
| 6JZ6 ..... | A1 B4 B8 B9 C2 D5 E3 G10 I8 I9 J10 K3 L1 L6 L7 M3 M10 N1 N9 | Use Compactron Adaptor on position X. Connect cap lead to tube cap. |
| 6KD6 ..... | A1 B4 B8 B9 C2 D5 D7 E3 G10 I7 I9 J10 K6 L1 L6 L8 M4 M10 N2 N9 | Use Compactron Adaptor on position X. Connect cap lead to tube cap. |
| 6KG6 ..... | A4 B2 B5 B7 C9 D1 D8 E3 E6 G10 J10 K3 L1 L6 L7 M3 M10 N1 N9 | |
| 6KN6 ..... | A1 B4 B8 B9 C2 D5 E3 G10 I6 I10 J10 K3 L1 L6 L8 M4 M10 N2 N9 | Use Compactron Adaptor on position X. Connect cap lead to tube cap. |
| 6KS6 ..... | A3 B4 C1 D2 D6 E5 G7 I6 I10 J1 K9 L1 M5 M10 N2 N9 | |
| 6LE8 ..... | A4 B5 C2 C3 C7 D9 E8 F1 G6 I6 I10 J5 K6 L1 L6 L7 M5 M10 N2 N9 | Test P1 and P2. |
| 6LM8 ..... Triode Unit | A4 B5 C7 C8 D9 G1 I6 I10 J2 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6LM8 ..... Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J4 K5 K6 L1 L6 L7 M5 M10 N2 N9 | |
| 6LN8 ..... Triode Unit | A4 B5 C8 D9 G1 I6 I10 J4 K5 L1 L6 L7 M4 M10 N1 N9 | |
| 6LN8 ..... Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M4 M10 N1 N9 | |
| 6LQ8 ..... Triode Unit | A4 B5 B6 C1 D2 G3 I7 I10 J1 K1 L1 L6 L7 M5 M10 N2 N9 | |
| 6LQ8 ..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K4 L1 L6 L8 M5 M10 N2 N9 | |
| 6LT8 ..... Pentode Unit | A4 B5 C1 D9 E2 G3 I7 I10 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6LT8 ..... Diode Unit | A4 B5 C7 F6 G8 I6 I10 K3 L3 L6 L7 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 6MB8 ..... Triode Unit | A4 B5 B8 C3 D1 G2 I7 I10 J1 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6MB8 ..... Pentode Unit | A4 B5 C8 D9 E7 G6 I6 I9 J1 K7 L1 L6 L8 M5 M10 N2 N9 | |
| 6MD8 ..... | A4 B5 C7 D6 D8 D9 F2 G3 H1 I6 I10 J6 K1 L1 M5 M10 N2 N9 | Use Novar Adaptor. Test P1, P2, P3. |
| 6MG8 ..... Triode Unit | A4 B5 C8 C9 G1 I7 I10 J1 K2 L1 L6 L7 M5 M10 N2 N9 | |
| 6MG8 ..... Pentode Unit | A4 B5 C7 D2 E3 G6 I6 I10 J2 K4 L1 L6 L7 M5 M10 N2 N9 | |
| 6U9 ..... Triode Unit | A5 B6 C1 D10 G9 I6 I10 J4 K6 L1 L6 L7 M5 M10 N2 N9 | Use 10-Pin Adaptor. |
| 6U9 ..... Pentode Unit | A5 B6 B9 C2 C4 D3 E8 G7 I6 I10 J3 K6 L1 L6 L8 M5 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| 6V9 ..... Triode Unit | A5 B6 C9 D8 G10 I6 I10 J3 K2 L1 L6 L7 M5 M10 N2 N9 | Use 10-Pin Adaptor. |
| 6V9 ..... Heptode Unit | A5 B6 B10 C1 D2 D3 E4 G7 I6 I10 J1 K8 L2 M5 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| 6X9 ..... Triode Unit | A5 B6 C1 D10 G9 I6 I10 J2 K7 L1 L6 L7 M5 M10 N2 N9 | Use 10-Pin Adaptor. Depress special leakage/gas button in gas test. |
| 6X9 ..... Pentode Unit | A5 B6 B9 C2 C4 D3 E8 G7 I6 I10 J3 K6 L1 L6 L8 M5 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| 6Y9 ..... Pentode Unit 1 | A5 B4 B6 C7 D8 E9 G10 I6 I10 J4 K4 L1 L6 L8 M3 M10 N1 N9 | Use 10-Pin Adaptor. Depress special leakage/gas button in gas test. |
| 6Y9 ..... Pentode Unit 2 | A5 B6 C2 D1 E3 G4 I6 I10 J3 K4 L1 L6 L7 M3 M10 N1 N9 | Depress special leakage/gas button in gas test. |
| 6Y10 ..... Pentode Unit 1 | A1 B9 C7 D6 E8 G10 I7 I9 J1 K6 K8 L1 L6 L8 M5 M10 N2 N9 | Use Compactron Adaptor on position Z. |
| 6Y10 ..... Pentode Unit 2 | A1 B5 B9 C2 D3 E6 G7 J1 K6 L1 M5 M10 N2 N9 | Use Compactron Adaptor on position W. |
| 6Z10 ..... Pentode Unit 1 | A1 B9 C8 D5 D7 E6 G4 I6 I10 J1 K8 L1 M5 M10 N2 N9 | Use Compactron Adaptor on position W. |
| 6Z10 ..... Pentode Unit 2 | A1 B9 C3 D10 E2 G7 I6 I10 J5 K3 L1 L6 L7 M5 M10 N2 N9 | Use Compactron Adaptor on position X. |
| 8AR11 ..... Pentode Unit 1 | A1 B5 B9 C10 D8 E7 G6 I7 I10 J1 K3 K4 L1 L6 L7 M5 M10 N3 N9 | Use Compactron Adaptor on position Z. Depress special leakage/gas button in gas test. |
| 8AR11 ..... Pentode Unit 2 | A1 B4 B9 C6 D5 E3 G2 I7 I10 J1 K3 K4 L1 L6 L7 M5 M10 N3 N9 | Use Compactron Adaptor on position V. Depress special leakage/gas button in gas test. |
| 8BA11 ..... Pentode Unit | A1 B5 B7 B9 B10 C8 D4 E3 F2 G6 I6 I10 J2 K8 L1 M5 M10 N3 N9 | Use Compactron Adaptor on position V. Test P1 and P2. Reject if below 3. |
| 8BA11 ..... Triode Unit | A1 B9 C8 D7 G10 I6 I10 J7 K7 L1 M5 M10 N3 N9 | Use Compactron Adaptor on position X. |
| 8BQ11 ..... Pentode Unit 1 | A1 B2 B9 C5 C10 D8 E7 G6 I7 I10 J1 K2 L1 L6 L7 M2 M10 N1 N9 | Use Compactron Adaptor on position Z. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| **8BQ11** ..... Pentode Unit 2 | A1 B7 B9 C4 C6 D5 E3 G2 I7 I10 J1 K7 L1 L6 L8 M2 M10 N1 N9 | Use Compactron Adaptor on position W. |
| **8BU11** ..... Triode Unit | A1 B9 C2 C5 D4 D6 F3 G7 I7 I10 J1 K2 L1 L6 L7 M3 M10 N2 N9 | Use Compactron Adaptor on position W. Test P1 and P2. |
| **8BU11** ..... Pentode Unit | A1 B9 C10 D6 E7 G8 I6 I10 J2 K3 L1 L6 L7 M3 M10 N2 N9 | Use Compactron Adaptor on position Z. |
| **8DX8** ..... Triode Unit | A4 B5 B7 C3 D1 G2 I6 I10 J2 K8 L1 L6 L7 M5 M10 N3 N9 | Depress special leakage/gas button in gas test. |
| **8DX8** ..... Pentode Unit | A4 B5 C7 D8 E9 G6 I6 I10 J3 K2 L1 L6 L7 M5 M10 N3 N9 | |
| **8GU7** ..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J7 K8 L1 L6 L7 M5 M10 N3 N9 | Test P1 and P2. |
| **8GX7** ..... Triode Unit | A4 B5 C1 C3 D9 G8 I6 I10 J2 K2 L1 L6 L7 M3 M10 N2 N9 | |
| **8GX7** ..... Pentode Unit | A4 B5 C1 C3 D2 E7 G6 I6 I10 J2 K8 L1 L6 L8 M3 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| **8JU8** ..... Diode Units 1 & 2 | A4 B5 B6 C3 C9 F2 G8 I6 I10 K7 L3 L6 L8 M5 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| **8JU8** ..... Diode Units 3 & 4 | A4 B5 B6 C2 C8 F1 G7 I6 I10 K7 L3 L6 L8 M5 M10 N3 N9 | Test P1 and P2. Reject if below 4. |
| **8LE8** ..... | A4 B5 C2 C3 C7 D9 E8 F1 G6 I6 I10 J5 K6 L1 L6 L7 M3 M10 N2 N9 | Test P1 and P2. |
| **8U9** ..... Triode Unit | A5 B6 C1 D10 G9 I6 I10 J4 K6 L1 L6 L7 M3 M10 N2 N9 | Use 10-Pin Adaptor. |
| **8U9** ..... Pentode Unit | A5 B6 B9 C2 C4 D3 E8 G7 I6 I10 J3 K6 L1 L6 L8 M3 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| **8X9** ..... Triode Unit | A5 B6 C1 D10 G9 I6 I10 J2 K7 L1 L6 L7 M3 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| **8X9** ..... Pentode Unit | A5 B6 B9 C2 C4 D3 E8 G7 I6 I10 J3 K6 L1 L6 L8 M3 M10 N2 N9 | Depress special leakage/gas button in gas test. |
| **9GH8** ..... Triode Unit | A4 B5 C7 C8 D9 G1 I6 I10 J2 K2 L1 L6 L7 M5 M10 N4 N9 | |
| **9GH8** ..... Pentode Unit | A4 B5 C7 D2 E3 C6 I6 I10 J2 K2 L1 L6 L7 M5 M10 N4 N9 | |
| **9V9** ..... Triode Unit | A5 B6 C9 D8 G10 I6 I10 J3 K2 L1 L6 L7 M5 M10 N4 N9 | Use 10-Pin Adaptor. |
| **9V9** ..... Heptode Unit | A5 B6 B10 C1 D2 D3 E4 G7 I6 I10 J1 K8 L2 M5 M10 N4 N9 | Depress special leakage/gas button in gas test. |
| **10CW5** ..... | A4 B5 C3 D2 E9 G7 I6 I10 J9 K6 L1 L6 L8 M4 M10 N5 N9 | |
| **10GK6** ..... | A4 B3 B5 B9 C1 D2 E8 G7 I6 I10 J5 K6 K7 L1 L6 L8 M3 M10 N4 N9 | |
| **10LE8** ..... | A4 B5 C2 C3 C7 D9 E8 F1 G6 I6 I10 J5 K6 L1 L6 L7 M5 M10 N5 N9 | Test P1 and P2. |
| **10LZ8** ..... Pentode Unit | A4 B5 C6 D7 E8 G9 I6 I10 J2 K6 L1 L6 L8 M3 M10 N4 N9 | |
| **10LZ8** ..... Triode Unit | A4 B5 B6 C1 D2 G3 I6 I10 J2 K5 L1 M3 M10 N4 N9 | Depress special leakage/gas button in gas test. |
| **11BM8** ..... Triode Unit | A4 B5 C8 D1 G9 I6 I10 J2 K5 L1 M4 M10 N5 N9 | Depress special leakage/gas button in gas test. |
| **11BM8** ..... Pentode Unit | A4 B5 C2 D3 E7 G6 I6 I10 J9 K3 L1 L6 L7 M4 M10 N5 N9 | |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| **11BT11** ..... Triode Unit 1 | A1 B9 C6 D5 G7 I8 I10 J1 K6 L1 L6 L7 M3 M10 N4 N9 | Use Compactron Adaptor on position W. |
| **11BT11** ..... Triode Unit 2 | A1 B9 C4 D3 G10 J1 K6 L1 L6 L7 M3 M10 N4 N9 | Use Compactron Adaptor on position W. |
| **11BT11** ..... Pentode Unit | A1 B9 C6 D10 E8 G2 I7 I9 J1 K4 L1 L6 L8 M3 M10 N4 N9 | Use Compactron Adaptor on position X. |
| **11FY7** ..... Triode Unit 1 | A1 B9 C7 D8 G10 I6 I10 J2 K7 L1 M1 M10 N2 N9 | Use Compactron Adaptor on position Z. Depress special leakage/gas button in gas test. |
| **11FY7** ..... Triode Unit 2 | A1 B9 C6 D2 G4 I6 I10 J10 K4 L1 L6 L7 M1 M10 N2 N9 | Use Compactron Adaptor on position Y |
| **11LQ8** ..... Triode Unit | A4 B5 B6 C1 D2 G3 I7 I10 J1 K1 L1 L6 L7 M3 M10 N4 N9 | |
| **11LQ8** ..... Pentode Unit | A4 B5 C6 D7 E8 G9 I7 I10 J1 K4 L1 L6 L8 M3 M10 N4 N9 | |
| **11Y9** ..... Pentode Unit 1 | A5 B4 B6 C7 D8 E9 G10 I6 I10 J4 K4 L1 L6 L8 M3 M10 N5 N9 | Use 10-Pin Adaptor. Depress special leakage/gas button in gas test. |
| **11Y9** ..... Pentode Unit 2 | A5 B6 C2 D1 E3 G4 I6 I10 J3 K4 L1 L6 L7 M3 M10 N5 N9 | Depress special leakage/gas button in gas test. |
| **12AE10** ..... Pentode Unit 1 | A1 B9 C7 D6 E8 G10 I6 I10 J9 K5 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on position Z. |
| **12AE10** ..... Pentode Unit 2 | A1 B9 C2 D3 D5 E6 G7 J2 K8 L1 M2 M10 N4 N9 | Use Compactron Adaptor on position W. |
| **12BF11** ..... Pentode Unit 1 | A1 B3 B9 C7 D6 E8 G10 I6 I10 J8 K7 L1 L6 L8 M2 M10 N4 N9 | Use Compactron Adaptor on position Z. |
| **12BF11** ..... Pentode Unit 2 | A1 B4 B5 B9 C2 D3 E7 G6 J3 K9 L1 M2 M10 N4 N9 | Use Compactron Adaptor on position W. Reject if below 3. |
| **12BY3** ..... | A4 B5 C10 G9 I6 I10 K4 L4 L6 L10 M2 M10 N4 N9 | Reject if below 4. |
| **12CK3** ..... | A4 B5 C9 G2 G7 I6 I10 K2 L3 L6 L8 M2 M10 N4 N9 | Use Novar Adaptor. Reject if below 3. |
| **12CL3** ..... | A4 B5 C9 G2 I6 I10 K5 L3 L6 L9 M2 M10 N4 N9 | Use Novar Adaptor. Reject if below 3 . |
| **12DW4** ..... | A4 B5 C9 G2 G7 I6 I10 K4 L4 L6 L10 M2 M10 N4 N9 | Use Novar Adaptor. Reject if below 3. |
| **12FQ7** ..... | A4 B5 C3 C8 D2 D7 F1 G6 I6 I10 J3 K1 L1 M2 M10 N4 N9 | Test P1 and P2. |
| **12HE7** ..... Diode Unit | A1 B9 C4 G2 I6 I10 K2 K3 L4 L6 L10 M2 M10 N4 N9 | Use Compactron Adaptor on position V. Reject if below 4. |
| **12HE7** ..... Pentode Unit | A1 B9 C6 D7 E10 G3 I6 I10 J10 K6 K7 L1 L6 L8 M2 M10 N4 N9 | Use Compactron Adaptor on position Z. |
| **12HL5** ..... | A4 B5 C3 D1 D2 E9 G7 I7 I10 J1 K9 L1 L6 L9 M2 M10 N4 N9 | |
| **12JN6** ..... | A1 B4 B9 C2 D10 E3 G7 I6 I10 J10 K2 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on position V. |
| **12JS6** ..... | A1 B9 C2 C4 C8 D5 E3 G10 I6 I10 J10 K6 L1 L6 L8 M2 M10 N4 N9 | Use Compactron Adaptor on position X. Connect cap lead to tube cap. |
| **12MD8** ..... | A4 B5 C7 D6 D8 D9 F2 G3 H1 I6 I10 J6 K1 L1 M2 M10 N3 N9 | Use Novar Adaptor. Test P1, P2, P3. |
| **13V10** ..... Pentode Unit 1 | A1 B9 C7 D6 E8 G10 I6 I10 J8 K4 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on position Z. |

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| 13V10 ..... Pentode Unit 2 | A1 B9 C2 D3 D5 E6 G7 J3 K8 L1 M2 M10 N4 N9 | Use Compactron Adaptor on position W. |
| 13Z10 ..... Pentode Unit 1 | A1 B9 C8 D5 D7 E6 G4 I6 I10 J1 K8 L1 M2 M10 N4 N9 | Use Compactron Adaptor on position W. |
| 13Z10 ..... Pentode Unit 2 | A1 B9 C3 D10 E2 G7 I6 I10 J5 K3 L1 L6 L7 M2 M10 N4 N9 | Use Compactron Adaptor on position X. |
| 14GW8 ..... Triode Unit | A4 B5 C2 D1 G9 I6 I10 J2 K9 L1 M1 M10 N3 N9 | Depress special leakage/gas button in gas test. |
| 14GW8 ..... Pentode Unit | A4 B5 C7 D8 E3 G6 I6 I10 J5 K2 L1 L6 L7 M1 M10 N3 N9 | |
| 15LE8 ..... | A4 B5 C2 C3 C7 D9 E8 F1 G6 I6 I10 J5 K6 L1 L6 L7 M5 M9 N1 N8 | Test P1 and P2. |
| 16Y9 ..... Pentode Unit 1 | A5 B4 B6 C7 D8 E9 G10 I6 I10 J4 K4 L1 L6 L8 M3 M9 N1 N8 | Use 10-Pin Adaptor. Depress special leakage/gas button in gas test. |
| 16Y9 ..... Pentode Unit 2 | A5 B6 C2 D1 E3 G4 I6 I10 J3 K4 L1 L6 L7 M3 M9 N1 N8 | Depress special leakage/gas button in gas test. |
| 17A8 ..... Pentode Unit | A4 B1 B5 C7 D2 E3 G6 I6 I10 J3 K5 L1 L6 L7 M4 M10 N2 N8 | |
| 17A8 ..... Triode Unit | A4 B5 B7 C8 D9 G1 I6 I10 J4 K5 K6 L1 L6 L7 M4 M10 N2 N8 | |
| 17AB10 ..... Pentode Unit 1 | A1 B9 C8 D5 D7 E6 G4 I6 I10 J1 K9 L1 M3 M9 N2 N8 | Use Compactron Adaptor on position W. |
| 17AB10 ..... Pentode Unit 2 | A1 B9 C3 D10 E2 G7 I6 I10 J9 K4 L1 L6 L7 M3 M9 N2 N8 | Use Compactron Adaptor on position X. |
| 17CK3 ..... | A4 B5 C9 G2 G7 I6 I10 K2 L3 L6 L8 M4 M9 N2 N8 | Use Novar Adaptor. Reject if below 3. |
| 17CL3 ..... | A4 B5 C9 G2 I6 I10 K5 L3 L6 L9 M3 M9 N2 N8 | Use Novar Adaptor. Reject if below 3. |
| 17DW4 ..... | A4 B5 C9 G2 G7 I6 I10 K4 L4 L6 L10 M3 M9 N2 N8 | Use Novar Adaptor. Reject if below 3. |
| 17GF5 ..... | A1 B9 C4 D3 E2 G7 I6 I10 J10 K3 L1 L6 L7 M4 M9 N2 N8 | Use Compactron Adaptor on position W. |
| 17JM6 ..... | A1 B4 B9 C2 D5 E3 G10 I6 I10 J10 K2 L1 L6 L7 M4 M9 N2 N8 | Use Compactron Adaptor on position X. Connect cap lead to tube cap. |
| 17JN6 ..... | A1 B4 B9 C2 D10 E3 G7 I6 I10 J10 K2 L1 L6 L7 M4 M9 N2 N8 | Use Compactron Adaptor on position V. |
| 21JV4 ..... | A1 B4 B9 C2 D10 E3 G7 I6 I10 J10 K6 L1 L6 L8 M2 M9 N3 N8 | Use Compactron Adaptor on position V. |
| 22JS6 ..... | A1 B9 C2 C4 C8 D5 E3 G10 I6 I10 J10 K6 L1 L6 L8 M2 M9 N4 N8 | Use Compactron Adaptor on position X. Connect cap lead to tube cap. |
| 22JU6 ..... | A4 B5 C3 C8 D2 D6 E1 E7 G10 I6 I10 J10 K5 K6 L1 L6 L8 M2 M9 N4 N8 | Use Novar Adaptor. |
| 22KM6 ..... | A4 B5 B8 C3 D2 D6 E1 E7 G10 I6 I9 J10 K2 L1 L6 L7 M2 M9 N3 N8 | Use Novar Adaptor. |
| 23Z9 ..... Pentode Unit | A1 B9 C5 D6 E7 G3 I6 I10 J9 K2 L1 L6 L7 M1 M9 N3 N8 | Use Compactron Adaptor on position Z. |
| 23Z9 ..... Triode Unit 1 | A1 B9 C5 D8 G10 I6 I10 J3 K7 L1 L6 L7 M1 M9 N3 N8 | Use Compactron Adaptor on position Z. |
| 23Z9 ..... Triode Unit 2 | A1 B9 C7 D3 G2 I6 I10 J6 K4 L1 M1 M9 N3 N8 | Use Compactron Adaptor on position V. |
| 24JE6 ..... | A4 B5 C3 C8 D2 E7 G10 I6 I8 J10 K4 L1 L6 L7 M1 M9 N4 N8 | Use Novar Adaptor. |
| 25CG3 ..... | A1 B9 C6 G3 G10 I6 I10 K1 L4 L6 L10 M5 M10 N1 N8 | Use Compactron Adaptor on position Y. Reject if below 3. |
| 27KG6 ..... | A4 B2 B5 B7 C9 D1 D8 E3 E6 G10 J10 K3 L1 L6 L7 M3 M10 N2 N8 | |
| 33JV6 ..... | A1 B9 C2 C4 D10 E3 G7 I6 I10 J10 K6 K7 L1 L6 L8 M1 M10 N4 N8 | Use Compactron Adaptor on position V. |
| 34R3 ..... | A4 B5 C10 G2 G9 I6 I10 K6 L4 L6 L10 M1 M10 N4 N8 | Reject if below 4. |
| 38HE7 ..... Diode Unit | A1 B9 C4 G2 I6 I10 K2 K3 L4 L6 L10 M5 M8 N5 N7 | Use Compactron Adaptor on position V. Reject if below 4. |
| 38HE7 ..... Pentode Unit | A1 B9 C6 D7 E10 G3 I6 I10 J10 K6 K7 L1 L6 L8 M5 M8 N5 N7 | Use Compactron Adaptor on position Z. |
| 38HK7 ..... Pentode Unit | A1 B9 C6 D7 E10 G3 I6 I10 J10 K6 L1 L6 L8 M5 M8 N3 N7 | Use Compactron Adaptor on position Z. |
| 38HK7 ..... Diode Unit | A1 B9 C4 G2 I6 I10 K1 L4 L6 L10 M5 M8 N3 N7 | Use Compactron Adaptor on position W. Reject if below 3. |
| 40KD6 ..... | A1 B4 B8 B9 C2 D5 D7 E3 G10 I7 I9 J10 K6 L1 L6 L8 M5 M8 N5 N7 | Use Compactron Adaptor on position X. Connect cap lead to tube cap. |
| 40KG6 ..... | A4 B2 B5 B7 C9 D1 D8 E3 E6 G10 J10 K3 L1 L6 L7 M3 M8 N4 N7 | |
| 42KN6 ..... | A1 B4 B8 B9 C2 D5 E3 G10 I6 I10 J10 K3 L1 L6 L8 M2 M8 N3 N7 | Use Compactron Adaptor on position X. Connect cap lead to tube cap. |
| 50E5 ..... | A2 B7 C8 D5 E4 G10 I6 I10 J10 K7 L1 L6 L7 M5 M7 N5 N6 | |
| 58HE7 ..... Diode Unit | A1 B9 C4 G2 I6 I10 K2 K3 L4 L6 L10 M5 M9 N3 N7 | Use Compactron Adaptor on position V. Reject if below 4. |
| 58HE7 ..... Pentode Unit | A1 B9 C6 D7 E10 G3 I6 I10 J10 K6 L1 L6 L8 M5 M9 N3 N7 | Use Compactron Adaptor on position Z. |
| 60HL5 ..... | A4 B5 C3 D1 D2 E9 G7 I7 I10 J1 K9 L1 L6 L9 M5 M9 N5 N7 | |
| 6203 ..... | A4 B5 C7 F1 G9 I6 I10 K4 L4 L6 L9 M5 M10 N2 N9 | Test P1 and P2. Reject if below 3. |
| 7737 ..... | A4 B5 C1 C3 C8 D2 E9 G7 I7 I10 J1 K6 L1 L6 L8 M5 M10 N2 N9 | |
| 7788 ..... | A4 B5 C1 C3 C8 D2 E6 E9 G7 I7 I10 J1 K1 K2 L1 L6 L8 M5 M10 N2 N9 | |
| 8084 ..... | A3 B4 C2 C7 D1 E6 G5 I6 I10 J4 K2 L1 L6 L7 M1 M10 N3 N9 | Depress special leakage/gas button in gas test. |
| 8149 ..... | A1 B9 C7 D8 E2 E6 G4 I6 I10 J10 K3 K4 L1 L6 L7 M2 M10 N5 N9 | Use Compactron Adaptor on position Z. |
| 8150 ..... | A1 B9 C2 C4 C7 D8 E3 E6 G10 I6 I10 J10 K3 K4 L1 L6 L7 M2 M10 N5 N9 | Use Compactron Adaptor on position Z. Connect cap lead to tube cap. |
| 8233 ..... | A4 B5 C2 C6 C9 D8 E3 G1 I6 I9 J1 K5 L1 L6 L9 M5 M10 N2 N9 | Use Novar Adaptor. |
| 8417 ..... | A2 B7 C8 D5 E4 G3 I6 I10 J7 K5 L1 L6 L8 M4 M10 N2 N9 | |

## CARD-PUNCH AND INTERCHANGEABILITY DATA FOR FOREIGN TUBE TYPES

| TUBE TYPE | HOLE LOCATIONS | TESTING INSTRUCTIONS |
|---|---|---|
| E810F | Use 7788 Data | |
| ECF200 | Use 6X9 Data | |
| ECF201 | Use 6U9 Data | |
| ECH200 | Use 6V9 Data | |
| GY501 | Use 3BH2 Data | |

# WG-324A

**Gas Tube Adapter For WT-110A**

The RCA WG-324A is a plug-in device which is designed for use with the RCA WT-110A Automatic Electron Tube Tester. By function, it increases the voltages available within the tester to a level sufficient to "fire" the gas tubes; and it also provides a current-limiting load for the gas tubes being tested.

In use, the WG-324A is simply inserted into the 8-pin locktal socket on the WT-110A panel. Then the gas tube to be tested is inserted into the proper socket.

A special card will be required for each gas tube to be tested. The following punch data is to be used in punching blank cards available in WG-325A packet.

| TYPE | HOLE LOCATIONS | NOTES |
|---|---|---|
| 0A2 | A8 G1 G5 K9 L1 L6 L9 M5 M10 N5 N7 | |
| 0A3 | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M9 N5 N8 | |
| 0B2 | A8 G1 G5 K9 L1 L6 L9 M5 M10 N5 N8 | |
| 0C2 | A8 G1 G5 K9 L1 L6 L9 M5 M9 N5 N8 | |
| 0C3 | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M10 N5 N8 | G1 shows short |
| 0D3 | A8 D2 D4 D7 G5 K9 L1 L6 L9 M5 M10 N5 N7 | G1 shows short |
| 0Z4 | A4 B7 F3 G5 K5 L5 L6 L10 M5 M6 N1 N8 | Test P1 and P2. |

After a card has been punched, it should be marked with the tube type number; and it should also be marked "For use only with WG-324A". The lettering is best done with an ordinary pencil. Wiping with a clear lacquer or thinned service cement will prevent the markings from being rubbed off.

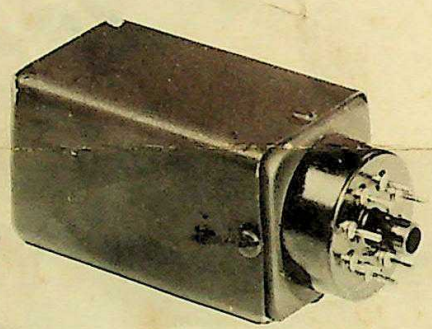


*Fig. #1*
*"WG-324A Gas Tube Adapter".*

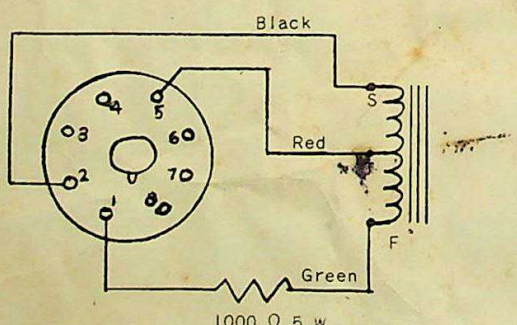



*Fig. #2 "Schematic Diagram of WG-324A. Illustration shows bottom view of base".*

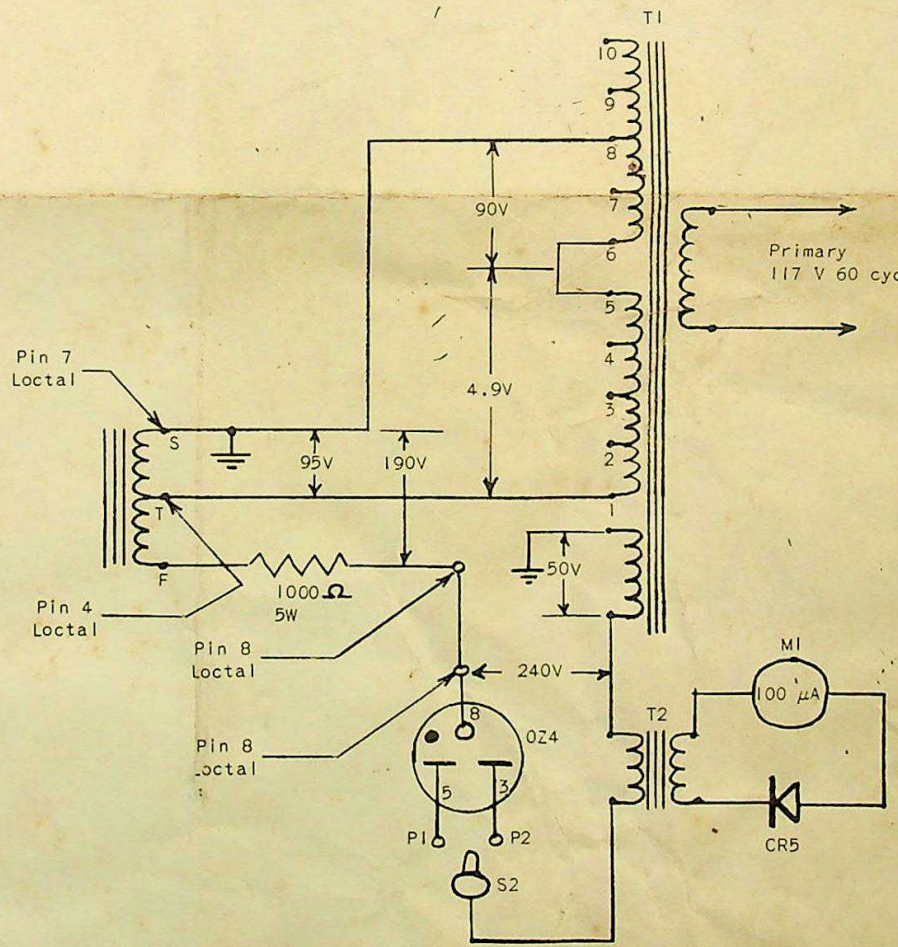



*Fig. #3*
*"0Z4 test in WT-110A with WG-324A".*


RADIO CORPORATION OF AMERICA
ELECTRON TUBE DIVISION, HARRISON, N. J.
(TEST EQUIPMENT, CAMDEN, N. J.)


TMK ®, Marca Registrada

Form #JBH 2-59

# TEST CARD B-904116-3

SEE INSTRUCTION BOOK FOR USE

INSERT CARD TO THIS LINE

TEST CARD

Radio Corporation of America

FIRST CLASS
PERMIT NO. 6
Sec. 510, P. L. & R.
CAMDEN, N. J.

# BUSINESS REPLY CARD

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY—

RADIO CORPORATION OF AMERICA

RETURN APPARATUS CONTROL

BUILDING 8-2

CAMDEN, N. J.

NOTE: Fill out and return this card immediately. Warranty is not effective unless all instrument numbers are filled in. PLEASE PRINT.

I purchased an RCA test instrument from (distributor)_____

_____ on (date)_____, as shown on his bill of sale and wish my name registered to insure my warranty

**Type No.** W **Code No.**_____ **Serial No.**_____
(See Panel) (See back of case)

NAME_____

STREET_____

CITY_____ ZONE_____ STATE_____

FORM T 1259 12-56

# I M P O R T A N T

THIS ENVELOPE CONTAINS YOUR
INSTRUCTION BOOK AND WARRANTY
REGISTRATION CARD

●

FILL OUT THE REGISTRATION CARD COMPLETELY
AND MAIL AT ONCE. YOUR INSTRUMENT IS NOT
COVERED BY THE WARRANTY UNLESS CARD
HAS BEEN RETURNED

●

WHEN WRITING, BE SURE TO MENTION
TYPE, CODE, AND SERIAL NUMBERS
OF THE INSTRUMENT

COMPONENTS DIVISION
RADIO CORPORATION OF AMERICA
CAMDEN, N. J.

T-955 12-56

Mauna

RCA WT-110 A
AUTOMATIC TUBE
TESTER
+WE 324A ADAPTOR

**McDONALD SALES CORPORATION**
RCA DISTRIBUTORS
P. O. BOX 23446
NEW ORLEANS, LA. 70123

RCA VICTOR
FIRST IN COLOR TV
NEW ORLEANS LA
JAN-5'68
05

RETURN REQUESTED.

**McDONALD SALES CORPORATION**
*Wholesale Appliance Distributors*
5500 Jefferson Hwy. P. O. Box 23507 New Orleans, La. 70123

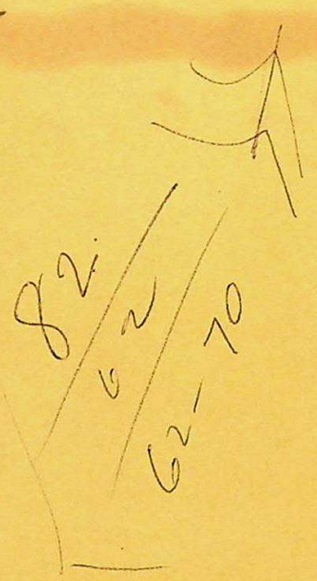
TO

L. BERNARD RADIO & TV SERVICE
P.O. BOX 218
BROUSSARD, LA. 70518

Our Order No.
FORM 113—RIVAS.

Cust. Order No.

THIRD CLASS MAIL


82
62
62-70